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NOTES AND COMMENTS.

Suffragette Prison Treatment All Round.

WHATEVER views we may hold as to the wisdom of the tactics of the militant suffragette, there can be no doubt whatever as to her persistency and self-devotion. She has presented administrative government with one of the hardest nuts it has been called upon to crack for many generations. In spite of the fierce public resentment stirred up by the recent window-smashing campaign, Mr. and Mrs. Pethick-Lawrence and Mrs. Pankhurst, the head-centres, so to speak, of the movement, have been released after a short spell of prison durance. The weapon that beats the Government is apparently the hunger strike. Mrs. Pankhurst refuses food, she is forcibly fed, the process is found to be not unattended with danger owing to the state of her heart, and straightway her prison doors are opened and she walks out a free woman. In other words, she has determined the length of her own service in prison. If justice of this kind is to be dispensed, well and good, but let it apply all round. Let all window smashers be treated as first-class offenders, and should they refuse food let them free, unless their bodily condition be sound enough to withstand the rigours of artificial feeding. The militant suffragette maintains that her offence is political. She claims that motive is the main factor in assessing the degree of offence of window smashing. Well, if a social disability, owing to alleged shortcoming in the laws, is in future to justify violence of that kind, the police magistrates will find their hands full of such cases, and first-class wings must be added to our gaols.

Prison Treatment.

FROM the point of view of health there is much to be said to the extension of first-class accommodation to all prisoners, or—to put the matter in another way—to raise materially the standards of food and environment in our prisons. If amelioration be needed in the case of the window-smashing suffragette, it is no less needed in that of other prisoners whose criminal motives may be less obviously altruistic and whose outside friends are less politically powerful. Our criminal system, in spite of recent reforms, is still brutal and unscientific, especially as regards summary punishment. The folly of a system that shuts up a man for days, weeks or months for some trifling offence against property, involving perhaps the value of a few pence, is fairly self-obvious to a little inquiry. The offender is branded for life, loses his situation, his family probably become chargeable to the parish, the cost of his prosecution and his maintenance in prison is thrown upon the taxpayers, and the person whose goods have been lost has no compensation! Lastly, while in prison he is fed in a way that reduces him in weight, and he is discharged to obtain a fresh footing in the world with the handicap of an enfeebled body. But, nevertheless, if this be right for the ordinary offender against property, it can hardly be wrong in the case of any window smasher, regardless of sex or motive. It is the window that counts.

In Defiance of the Law.

IT is the fashion nowadays to defy the law. One has only to glance round upon current events to recognise the truth of that proposition. There are the suffragettes assaulting the Prime Minister in his own house, the Ulster party threatening armed resistence to Home Rule in Ireland, the Anglican Church asserting its right to ostracise from communion persons married according to statute law, while the man in the street protests energetically against this, that or the other Act that may not suit particular views. To a limited extent this sort of resistance is wholesome and desirable, but beyond a certain point, which it is not always possible to define with precision, it enters the danger zone. When the dockers of the metropolis assert their dissatisfaction against certain social conditions by strikes and general violence, society is at once faced by the danger of starvation and of the suspension of law and order. Clearly if it be right for one set of citizens to defy the law it can hardly be wrong for another set to do a similar thing. Now it is somewhat curious that a journal distinguished for its severe criticism of the medical profession, in lamenting the "rampant lawlessness" of modern unrest, makes no mention of the "doctors," who, of all others, have defied the tyranny of an Act of Parliament. The explanation apparently is that they have been too strong for the Government and that we are on the verge of a settlement that will practically concede the just demands of the profession.

Report of Select Committee on Nostrums.

THE *Daily News*, the above-mentioned castigator of medical ethics, has published no report whatever of the past few sittings of the Select Committee of the House upon proprietary remedies. In place of it there are numerous advertisements of nostrums of all kinds claiming to cure a host of maladies, thus usurping a function which the State four centuries ago decreed in its wisdom should be entrusted solely to duly trained and licensed medical practitioners. The *Daily News*, however, is paid for publishing the claims of ignorant and unlicensed persons to cure all human maladies, whether curable or incurable. It is readily understandable, then, why that journal should decline to publish evidence exposing the real nature of such remedies, or to advertise the British Medical Association book detailing their analyses and scientific value. Assuming that a hundred pounds a day is received for the columns of advertisements of nostrums and unqualified methods of treatment in that journal, the yearly total accruing from that quarter accounts for a good deal. What need is there of a medical profession at all? The average man in the street has only to read the advertisements in the daily newspapers and choose his own medicines. Why waste his time and money in going to surgeons and consulting-rooms? Moreover, he has sound justice on his side, for it is he in the long run that pays the advertisement bills of the newspaper proprietors.

The Notification of Venereal Diseases.

The prevalence of venereal disease in the United Kingdom constitutes a standing reproach to our modern methods of dealing with communicable disease. From a strictly logical point of view there is little consistency in saving or attempting to save folk, in spite of themselves, against such maladies as small-pox, scarlatina and enteric fever, if we leave a terrible disease like syphilis to stalk naked and unabashed throughout the Kingdom. The main difficulty in dealing with venereal disease arises from the question of sexual morality with which it is inseparably combined. When called upon to treat a patient suffering from pneumonia or quinsy we do not seek to learn his views upon monotheism or the Lord's Supper, or any other doctrinal matter; we simply cure or relieve him as quickly as may be. Yet the provision for the treatment of venereal diseases in the United Kingdom is scanty, perfunctory and furtive in its methods. The result is that many innocent persons are branded with the physical disabilities attached to these most preventable of diseases, and the State suffers from a constant drain upon the health of the community. Why cannot religious leaders face the position squarely and fairly?

LEADING ARTICLES.

THE INSURANCE ACT AND A PUBLIC MEDICAL SERVICE.

Now that the principles of practical organisation have been firmly grasped by the medical profession, there seems to be every prospect of speedy and satisfactory results. The whole history of the insurance negotiations with the Government, indeed, points to a continuous development of policy based upon lines of diplomatic diplomacy which would do credit to any political party in the state. The early days of the Bill were marked by an obvious attempt on the part of its framers to play fast and loose with the medical profession and to force upon them terms that were advantageous to the community at large, but disastrous to the last degree as regards the interests of the large class of private practitioners upon whom would fall the duty of administering medical benefits under the Act. The Chancellor of the Exchequer, in his anxiety to carry through a piece of difficult legislation at all costs, fell into the perhaps not unnatural error of imagining that in negotiating with the Council of the British Medical Association, he was dealing with the profession itself. From that dream he was rudely awakened by the clamour raised from one end to the other of the medical profession upon his appointment of the medical secretary of the association, Mr. Smith Whitaker, to the chairmanship of the Insurance Commissioners. The day of that announcement witnessed the birth of medical organisation as a practical and living force. The Council of the Association, curiously enough, still holds the reins of government of the Association, in spite of a hailstorm of votes of censure from all parts of the Kingdom. The first great fruit of the new spirit, however, was to force upon the Government the six cardinal points as the serious ultimatum advanced by the profession. From that time there has been no wavering, and Mr. Lloyd George must have realised that there can be no alternative basis of agreement if the medical benefits of the Act are to be administered by duly qualified medical practitioners. At the present moment, nevertheless, we are within a few days of the launching of the Act, and so far no agreement has been arrived at. Yet the pamphlets issued wholesale by the Government dwell pointedly on the advantages of free medical advice and medicine which will accrue to the insured. Out of all this tangle emerges the solid fact that at the eleventh hour medical men do not know what will be the exact position offered to them under the Act. It has been wisely resolved, therefore, to be prepared for all emergencies by resolving, as a profession, not to take contract practice on any terms short of those demanded by the cardinal resolutions, and by organising forthwith an alternative public medical service, the management of which should be retained in the hands of the profession. In the latter connection an important step has been taken by the medical men of the borough of Leicester, Leicestershire and Rutland. They have resigned as a body all positions held in connection with friendly societies, clubs and dispensaries, the said resignation to take effect in December. Their official resignation is accompanied by a letter announcing the formation of a public medical service for the area concerned, the same to be absolutely under professional control. This straightforward action, we venture to hope, will commend itself to medical men generally throughout the Kingdom. There is no better safeguard of individual rights than a properly equipped organisation for effective defence. Had the profession simply maintained its ultimatum without establishing an alternative public service, it would simply have burnt its boats and been at the mercy of the enemy. Meanwhile it has been impossible to gain any definite information, in or out of Parliament, as to the exact position of the negotiations with regard to the co-operation of medical men under the Act.

THE HEALTH OF THE CITY OF LONDON IN 1911.

The annual report of the Medical Officer of Health for the City of London, Dr. W. Collingridge, has recently been issued, and, as might be expected, contains a large amount of useful and interesting information. In the first place it should be borne in mind that there is, of necessity, a great difference between the day and night population of the City. The former was estimated by the census of 1911 as 364,061 persons, while the latter was only 19,475. It is upon the residential population, therefore, that all vital statistics in this report are calculated. On these figures the death-rate last year was only 10.9 per thousand of the population, as compared with 15.0 per thousand for the whole metropolis, rather a striking difference. The infantile mortality of children under one year of age was 46.3 per thousand, as against 128 for the whole of London. Such a low mortality is a great triumph for modern sanitary science, and is no small tribute to the zealous manner in which hygienic measures of every kind have been carried out by the health authorities. The compulsory notification of chicken-pox, cerebro-spinal meningitis, and pulmonary tuberculosis, has, of course, helped to diminish the risk of infection from these sources. It may not be generally known that arrangements have been made for the free examination of specimens for pathogenic bacteria sent by medical practitioners in cases of infectious disease occurring amongst their patients residing in the City. Dr. Collingridge calls attention to the fact that the number of conscientious objectors is still far too high, being 11.9 per cent. It is not pleasant to think what would happen in the event of an outbreak of small-pox in the City amongst so many unprotected persons. Some day, when it is too late, the legislature will wake up to find the metropolis in the throes of a fearful epidemic, and then, perhaps, after the population has been devastated, it may begin to consider the advisability of repealing the Vaccination Act of 1907. The work of the Woman Sanitary Inspector, retained by the Corporation specially to inspect and report upon conditions affecting infantile mortality, has borne excellent fruit. During the hot, dry weeks of last summer, May to September, only five deaths from diarrhœa or enteritis in infants were registered in the City. The investigation into the character of the milk arriving in London has received considerable attention, no less than forty-two samples having been taken at railway stations in the City on arrival from eight different counties, and submitted to Dr. Klein for bacteriological examination. Of these, twenty samples caused disease, either acute fatal results, or local inflammation and abscess, when injected into guinea-pigs, though none produced tuberculosis. The number of samples in which dirt was found is fairly large, and this indicates an unsatisfactory state of affairs, either at the farm or during transit. One of the most important portions of the report is that dealing with the supply and the inspection of meat and fish. The Corporation have now a laboratory well fitted up for all examinations of meat, with every necessary appliance. It is stated that out of the 435,316 tons of meat, fish and poultry dealt with at Smithfield in 1911, only 22 tons 4 cwt. 2 qr. 6 lb. were found to be tuberculous. With regard to shell-fish, Dr. Collingridge believes that the time has arrived when some legislative measure should be placed upon the Statute Book, prohibiting altogether the sale of oysters, winkles, cockles, etc., from any polluted source, for as long as the protection afforded to the consumers of meat and other foods is withheld from the consumer of shell-fish, the consumption of these edibles must be attended with a certain amount of risk. It is satisfactory to note that offences under the Sale of Foods and Drugs Act showed an appreciable diminution as regards the percentage of cases of adulteration, as compared with previous years. Altogether, Dr. Collingridge is to be heartily congratulated upon the success of the past year's work, while the residents of the City of London may sleep soundly, well knowing that their sanitary interests could not be looked after better in any other city in the world.

CURRENT TOPICS.

The Medical Defence Union.

A study of the annual report of the Medical Defence Union for 1911, which has just been issued, shows that the work of this indispensable protection society has been carried on with unabated vigour and with increased usefulness. The passing of the National Insurance Act, as might be expected, has caused hundreds of members to seek for advice upon numerous vexed questions in respect to their positions and practices, and it is proposed to appoint a Standing Committee especially to deal with these problems that must become more and more frequent as time goes on. A timely warning is contained in the report against the assistance given, sometimes unknowingly, by consultants, specialists, and other registered medical practitioners to unqualified persons who may assume styles and titles implying that they are entitled to practice medicine. The Union is ever upon the alert to prosecute such persons wherever this is possible, so that the position and interests of qualified practitioners are thereby supported and protected. A perusal of the solicitor's report shows the extensive nature of the legal defence conducted by the Union on behalf of the members. Of the 141 cases falling within the year's work, 45 had reference to libel and slander actions; 35 were associated with claims for damages for alleged malpraxis; 7 were directed towards the prosecution of unqualified practitioners and the suppression of unqualified practice, while the remaining 54 had to do with matters of personal and general import. The benefits that are derived from membership of the Medical Defence Union, the premier society of its kind, are so material and obvious that medical practitioners who are not thus protected should seriously reconsider their position. All medical men, whatever the nature of their practice, may be liable to actions for alleged negligence, or may be otherwise victimised, and it is much safer to be wise before the event. *Verb. sap. sat.*

Pollution of Swimming Baths.

WE are apt to regard the increased use of swimming baths both by school children and by adults as conducive to the better health of the community, and in the main we are right. Nevertheless, there are dangers which must not be overlooked. It has been suggested that outbreaks of poliomyelitis have been due in some instances to infection of public baths; but the matter yet awaits proof. That bath water may be highly infective, however, with the germs of disease has been proved by Dr. Graham Forbes. In a pamphlet on "The Pollution of Swimming Baths," recently published by the Medical Officers of Schools Association, he relates his investigations into the bacterial flora of a small swimming bath in an industrial school of the London County Council. He found that after the water had been in the bath for a few days he was able readily to separate such organisms as *Staphylococcus aureus, Streptococcus fæcalis and Bacillus coli.* The latter was present in all but the smallest quantities of the water examined. There was thus distinct evidence of fæcal contamination of the water. The presence of such organisms as have been mentioned is sufficient to explain outbreaks of such infections as conjunctivitis and sore throat. One can see, also, how readily typhoid fever might be disseminated from an infected bath. It therefore behoves all who have the care of baths used by a number of people to adopt stringent measures to secure the innocence of the water used. Either the water must be changed with greater frequency than is the custom at present, or measures must be adopted to secure its sterilisation.

The Opening of the King Edward Infirmary at Bristol.

A FURTHER evidence of the deep interest taken by King George V. in the welfare of the hospitals was given last week, when his Majesty visited the ancient city of Bristol to open the new King Edward VII. Memorial Infirmary. Realising the hopelessness of attempting to deal piecemeal with the old buildings, the governors recognised in Sir George White, their new president, a leader possessed of daring and initiative, and thus it is that the new building, estimated to cost £70,000, has now been opened. Accommodation is provided therein for 181 patients, and it is to be devoted to surgical, casualty and special departments. According to the War Office scheme, it is necessary to provide a base hospital in Bristol, with 520 beds. By the opening of the new infirmary and extension of the Nurses' Home 600 beds could be placed at the disposal of the military authorities, should the occasion ever arise, for the Royal Infirmary is the base hospital of the Second Southern Military District. We may join in the hope, expressed by his Majesty in replying to the address from the governing body, that the necessity for such a subsidy may never arise, but, at the same time, it is gratifying to realise that the spirit of patriotism is not antagonistic to that of providing for the relief of the sick and suffering on the most lavish and scientific scale. The arrangement and equipment of the new infirmary leave nothing to be desired, and the building is a standing monument to the large-heartedness of the citizens of Bristol.

The General Medical Council and the Maternity Benefit.

THE General Medical Council has, in a memorandum published a few days ago, drawn the attention of the National Health Insurance Joint Committee to the necessity of the regulations of the various commissions being so framed as not to permit the administration of the maternity benefit to interfere with the due training of medical students in practical midwifery. It is a subject on which we have commented more than once. There has been some difference of opinion as to whether the words of the Act allow of the framing of regulations sufficiently strong to safeguard obstetrical teaching. It has been assumed in some quarters that amendment of the Act would be necessary. The General Medical Council, acting presumably on counsel's opinion, does not take this view. The Council maintains that it is in the power of the Commissioners to make the regulations sufficiently clear and strong, and the memorandum puts the matter clearly before the Joint Committee. In a letter of acknowledgment, Sir Robert Morant states that he fully recognises the importance of the recommendations of the Council, and, when the time comes for framing regulations, will take into account all they have said. We hope that the action of the Council will make sure that the danger threatened by the maternity benefit may be avoided.

Pedestrians and Vehicles.

IN all civilised cities there are by-laws governing vehicular traffic. Not only is the driver of a vehicle subject to action for damages should he injure anyone by breach of the traffic regulations, but he is punishable by fine for mere breach of them, even without the infliction of any injury. In few places, however, are there regulations to govern the movements of pedestrians. It is, indeed, alleged by strangers to Paris that, should a foot-passenger be so unfortunate as to be run down by an automobile or a *fiacre*, it is he, and not the driver of the vehicle, who is liable to legal penalties. However this may be, there is no doubt that it is almost as necessary in a large city to control pedestrian as vehicular traffic. Every cyclist and motorist knows the foot passenger who steps suddenly off the footpath, or who wanders along the middle of the way, or who chooses to cross the street obliquely rather than by the established crossings. Such people are not only in constant danger themselves, but they constitute a danger to others. It is true that in the course of time a process of natural selection would probably eliminate them. In the meantime, it is not fair that they should be permitted to harass the more careful members of the community. It is satisfactory to find that the more progressive people of the West have not only invented an appropriate term for the class of whom we have spoken, "jay walkers," but have determined to regulate them as well as vehicular traffic. Kansas City, for instance, has adopted an ordinance for the control of pedestrians, and the experiment will be watched with interest by the rest of the world.

The Health of Europeans in West Africa.

IT is gratifying to note that, according to a White Paper recently issued by the Colonial Office, the health of European officials resident on the West Coast of Africa shows a considerable improvement last year as compared with former periods. Thus, in 1911 the total death rate was 13.9 per 1,000, a decrease of 6.5 from that of the previous year; excluding five deaths due to causes other than disease, the rate per 1,000 was 11.7, or a decrease of 5.0 from the corresponding rate for 1910. The considerable fall in the death rate for 1911 must be regarded as very satisfactory, especially in view of the fact that during the year there were serious outbreaks of yellow fever in the Gold Coast and the Gambia. These outbreaks accounted for the deaths of 13 non-native unofficials in the two Colonies, in addition to the four deaths of officials included in the returns. The larger number of deaths were due to blackwater fever and yellow fever. Twenty-two deaths occurred in West Africa, eight in this country, and two at sea. A further decrease of 7.3 per 1,000 in the invaliding rate may be noted, but it should be stated that the number pensioned on account of ill-health has very nearly doubled, though the proportion of these to the total has not materially altered. It may be mentioned, as supporting the view that a man quickly recovers from the effects of the West African climate, that officials invalided from the service are not infrequently found fit for re-employment after residence of a year or so in this country. Also officials, when pensioned off, generally enjoy their pensions for many years; in one or two cases the period on pension has been as much as 40 years. With the progress of sanitary science we may expect to see a still further diminution in the death rate among Europeans in this tropical region.

The Museum of the Royal College of Surgeons.

One of the most interesting places in London to the medical practitioner or student is the museum of the Royal College of Surgeons in Lincoln's Inn Fields. According to the annual report of the Museum Committee, recently issued, the collection has been enriched by the addition of over one thousand specimens. Priority of place must be given to a collection which has been presented by the executors of the late Lord Lister through the president of the college, Sir Rickman J. Godlee. This comprises Lord Lister's surgical instruments, appliances used in early researches, records, and tracings of experiments, drawings, and pathological specimens. Another collection of surgical instruments, formerly the property of the Obstetrical Society, was presented by the Royal Society of Medicine, while Mr. Penrose Williams, of Bridgwater, has presented the whole of his collection, containing many desirable specimens. The college has also acquired by purchase several crania and skeletons of the native Australian race, while several presentations have been made which are of real value. Many rare and valuable specimens have been added to the series illustrating the osteology and diseases of the ancient Egyptians. Remains of ancient man have also been presented which were found in a cave, with wall decorations of a primitive type, in the south of Spain, and some casts of certain remains of ancient man which have given rise to much discussion in Europe. These are the only casts so far received in England. The Archæological Society of Broadstairs presented a series of skulls and skeletons belonging to the Bronze and Anglo-Saxon Periods. These have been investigated and, for the first time, an approximately complete articulated skeleton of one of the Bronze Age men has been obtained. The medico-legal collection, recently formed, will prove to be a most interesting section, towards which a human femur, with photographs of human remains, found in the ruins after certain Anarchists were besieged in Sidney Street, Whitechapel, in January, 1911, has been presented. The specimens were the means by which it was established that one of the men who perished in the ruins was "Joseph"—a notorious Anarchist. These new additions to the museum will be on view on the occasion of the Council Election on July 4th, and also on the two following days.

PERSONAL.

T.M. The King and Queen visited the Royal Hamadryad Seamen's Hospital at Cardiff last week, spending some time in the wards of the institution.

H.M. Queen Amelia paid an informal visit to the London (Royal Free Hospital) School of Medicine for Women last week, being received by Mrs. Garrett Anderson, M.D., and conducted over the Medical School.

Mr. Aslett Baldwin, F.R.C.S., has been appointed Surgeon to St. Mark's Hospital.

Mr. G. F. Darwall Smith, M.B., B.Ch.Oxon., F.R.C.S., has been appointed Assistant Obstetric Physician to St. George's Hospital.

Sir Thomas Barlow, Bt., K.C.V.O., M.D., was among the recipients of the Hon. Degree of D.C.L. of the University of Durham last week.

Dr. M. Cameron Blair, of Northern Nigeria, has been elected President of the Caledonian Medical Society for next year, when the annual meeting will be held in London.

The subject of the address of the President of the British Association, Dr. E. A. Schäfer, F.R.S., at this year's meeting at Dundee will be "The Nature, Origin and Maintenance of Life."

Dr. E. E. Glynn, M.A., M.D., M.R.C.S., L.R.C.P., has been appointed to the George Holt Professorship of Pathology at the University of Liverpool, rendered vacant by the death of Sir Rubert Boyce.

Dr. T. Strain, M.O.H. for Barnes, has been appointed Medical Officer of Health for the Heston and Isleworth district, in succession to Dr. G. F. Buchan, who has been appointed to a similar position at Willesden.

Dr. Victor James Woolley, M.D., of King's College, Cambridge, has been awarded the Raymond-Horton Prize for 1912 for his M.D. thesis upon "The Time-Relations of the Actions of Entero-Kinase and of Trypsin under Various Conditions."

The thesis submitted by Dr. Alfred Ernest Barclay, B.C., M.D., of Christ's College, for the same degree, gained a *proxime accessit*, the subject being "The Diagnosis of Gastric and Œsophageal Affections by X-ray Methods."

Mr. H. W. Armit, M.R.C.S., L.R.C.P., Secretary of the British Section of the International Hygiene Exhibition at Dresden, has received from the Royal Saxon Government, as a memento of their appreciation of his co-operation, an ornamental piece from the Royal Porcelain Factory of Meissen.

FRENCH CLINICAL LECTURE

ON

DECANCERISATION. (*a*)

By Dr. J. GAUBE DE GERS.

[Specially Reported for this Journal.]

By the word "decancerisation" I mean the disappearance under the influence of a special treatment of all cancerous manifestations in man. Biologic mineralogy has furnished us with the elements for curing cancer in man, as it has also furnished us with the elements of curing other grave diseases. It is thus that decancerisation is obtained by means of a colloid of copper introduced into the organism by subcutaneous injection.

What is cancer? We are ignorant of its essence; we know cancer by the nature of its qualities, by its manifestations, of which the most characteristic is an unlimited proliferation of a cellular element penetrating into the neighbouring tissues until they are destroyed and capable of infecting all parts of the body; hence it may be affirmed that every cancer whose proliferation is arrested is a cancer cured. Well, our colloid of copper rapidly arrests the proliferation of the cancerous cell. Is cancer contagious? Is cancer hereditary? In the present state of our knowledge, it is very difficult to answer affirmatively or negatively this question; however, it seems to me that there exists beyond all doubt a cancerous soil.

I have already collected a large number of observations of men and women affected with cancer. In nearly all I found a family aptitude to cancer. I know a family in which cancer has been perpetuated for the last two hundred years, either in the principal branch or in the collateral branches. Without doubt there exists in this family a soil specially prepared for the development of cancer. It is not rare to meet with persons predestined to cancer by the constitution of their soil, which, if particularly studied, will be found to contain a great abundance of chlorine and oxalic acid independently of the food *régime*; the soil of a confirmed cancerous patient is saturated with these minerals, but it varies according to the nature of the organs affected. On the other hand, the provoking causes of cancer are the same for all human beings. Cancer of the breast is one of the most frequent in women, yet every woman who has received a bruise on the breast does not present cancer Smokers are much more numerous than epitheliomas of the tongue.

No matter what may be the nature and the heredity of cancer, I believe myself justified in stating that the cure of cancer is possible to-day, either in the case of non-operated cancer or in relapse after operation, provided that the lesion of the organs or the generalisation of the disease has not rendered all life impossible. Our colloid of copper is a colloid of protoxyde of hydrated copper; it is obtained chemically by reduction of salts of copper in presence of albumosic acid. Why did I choose copper instead of any other metal? First, because in my youth I learnt to consider the waters of St. Christav as efficacious against cancers of the tongue and the skin. The efficacy of the St. Christav waters was derived from the presence of copper in their constitution—at least, it was thought so. I must confess I thought so also, and I think so still.

Secondly, because, in treating cancer, I never employed but those metals which enter as elements of constitution in any of the animal varieties, because I remarked that the elements thus chosen were but slightly toxic for man; copper is the predominating element of the mineral matter contained in the colouring matter of the blood of the octopus —the dreadful animal that everyone knows. The beneficial action of the waters of St. Christav on cancer brings to my mind a case of the highest interest possessing all the value of an experiment, and which was told me by a distinguished chemist. Some ten years ago M. J., manager of an institute for the culture of yeasts, sent one of his assistants to Paris to put up a plant. It was at the time when all kinds of yeasts or ferments began to be employed in therapeutics. It happened that the wife of one of the directors of the establishment, who was suffering from a tumour of the breast, took the yeast coming from the newly installed apparatus. This apparatus was in copper, and each time the lady took the yeast prepared in this apparatus she got relief from pain, and in time the volume of the tumour diminished in notable proportion. But, as the chemists had remarked that the yeast prepared in this apparatus contained a certain quantity of copper in its protoplasma, they erected alongside another apparatus made entirely of glass. From this moment the patient took the yeast from the glass apparatus, but, without knowing why, she experienced no longer any benefit. The colloid of protoxyde of copper was not prepared at first in a therapeutic point of view; it was prepared with other metallic colloids while seeking for the conditions under which the mineral matter is found in the different organisms. I prepared, preferably, colloids of biodynamic metals; copper, in general, is a biodynamic metal for certain species of animals —such as cephalopodes and crustacea. I remarked that those metals which are biodynamic for certain inferior animal species are scarcely toxic for man; on the other hand, we know that animal life is made up of a small number of metals only, so that the addition or subtraction of a biodynamic foreign element proper to the species modifies the mineralisation of this species, and with it the relation of the elements of constitution—in other words, its manner of life. In small doses, the antiseptic action of salts of copper is more than doubtful; in larger doses they are irritating; they coagulate albumen. On the other hand, the anticryptogamic action of salts of copper is proved for many years, principally when they have as adjuvants alkaline bases which provoke their reduction in a certain measure.

If the old adage: *Naturam morborum curationes ostendunt* were true, I should be right in supposing that the evolution of cancer in the human organism is produced by the presence of a cryptogam; but I know of no experimental fact up to the present which would corroborate the hypothesis. Colloid of copper should be preserved

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(*a*) Lecture delivered before the Soc. Med. de Practiciens, Paris.

in ampoules of yellow glass and free from light; the ampoules which we use contain five grammes (one drachm) and one hundred and one-hundreth of a milligramme (0.00121) of pure copper. The colloid is not toxic, and can be injected either under the skin or into the muscles. The injections are painless, but, on account of the viscosity of the liquid, they should be practised slowly. No reaction generally follows, either local or general; sometimes, when on withdrawing the needle a drop of blood is observed, a slight erythema may be observed the following day, but of no account. This insignificant accident may, however, be avoided by first inserting the needle, and if no blood comes out the injection may be practised. These injections are renewed every four days at the beginning of the treatment; afterwards they may be renewed less often and continued in the same conditions according to the susceptibility of the patient, or even repeated every two days, but never should the injection be made in the same place.

The reaction of the colloid on cancer is very manifest. From the first injections, the cancerous tumour, non-ulcerated, diminishes in volume, while the suffering becomes attenuated and the volume of the glands diminishes in proportion to that of the parent tumour; I observed in a number of cases that the glands became lenticular.

The curative action of the colloid would seem to be more slow on operated cancers and on relapses than on non-operated cancers. Every cancer abandoned to itself finishes by ulceration; under the influence of the colloid this ulcer decreases from the circumference to the centre as the cancerous tissue surrounding the ulcer disappears; the ulcer dries up in the centre, but it does not cicatrise before the peri-cancerous tissue disappears itself.

The secondary infections which so frequently accompany cancerous ulcer are but little influenced by the colloid, but I observed that from the *début* of the treatment of the ulcerated cancers, cases of secondary infections became more and more rare. The cancerous tumours are affected in a very special manner by the injections of the colloid of copper; they present to the touch no sign which would permit us to recognise the processes of regression or absorption; they present right at the moment of their disappearance the same sensation of sponginess or resistance, the same form. One sensation, however, remains, as much for the patient as for his friends, the disappearance of the tumour. This becomes so complete after a few months that it is impossible to find any trace of hitherto voluminous tumours. The cancerous cells are completely absorbed by the organism; I do not know the mechanism of the absorption, and have vainly sought for the products of this absorption in the humours and the excreta.

The intensity of the destructive action of the colloid of copper on non-ulcerated cancer appears to be in direct ratio to the rapidity of its development, that is to say, the colloid acts more quickly on cancers of rapid evolution, on acute cancers, so to speak, than on chronic cancer. I had a case of adenoma of the breast which remained torpid for several years; suddenly, from some unknown cause, it became painful and increased rapidly in volume. When I saw the patient, the tumour was irregular, hard, ligneous, and the volume of a large hen's egg; after three injections of colloid of copper, practised every eight days, the tumour diminished to the size of a small walnut; the pain had disappeared and the patient, who had not been able to lie on that side on account of the pain produced by the tumour, could change position at will. At the moment of writing these lines (February 12th), the patient is completely cured, no trace of tumour can be felt; eight injections (one a week) sufficed to bring about a cure.

Do these injections produce a definite cure of cancer? Is decancerisation fully accomplished? For my part I have good reason to believe it, but my cases are too recent to be affirmative, they date from one, two, six and seven months. However, I observed three cases of cancer: one, a voluminous tumour of the left breast, another, a cancer of the larynx with a large gland on the right parotid, the third, a cancer of the stomach in the region of the pylorus; the two latter live a little outside Paris. After five injections, the third patient, for reasons not under his control, was obliged to interrupt the treatment. I saw him five weeks later and found that he was in the same condition as I left him, that is to say, the tumour was much diminished and painless, while the general condition had improved. I saw the second patient ten weeks after the third injection (the last) locally, the patient was in a satisfactory condition; the mass of glands of the neck had diminished, deglutition was improved as well as the voice, and so much that the patient ceased the treatment. The cancer of the breast, which was in a very satisfactory condition when the patient stopped the treatment, was found in the same condition six weeks afterwards. In these three patients, who only accepted the treatment for a limited time, if it was true that the cancer had not receded in a remarkable manner, yet the disease had not continued to develop and the characteristic pain of the cancerous evolution had not returned. It seems to me that the situation of these three patients, after several weeks without treatment, pleads in favour of the possibility of definite decancerisation, provided that the treatment be continued for a certain time after the complete cure.

I possess notes of fourteen cases of cancer treated by colloid of copper, of which four were completely cured, six are on the road to recovery, while the remaining four have been much improved. These fourteen cases comprise cancer of the breast; woman, 45, cured (father died of cancer of stomach, sister of cancer of the uterus); woman, 67, doing well; woman, 35, doing well (mother and two aunts died of cancer).

Left lobe of thyroid gland: woman, 72, doing well (father and grandfather died of cancer).

Epithelioma of the internal canthus of the left eye: woman, 56, cured; cancer of the cæcal pouch, much improved (grandfather, grandmother and grand aunt died of cancer).

Voluminous sarcoma of the abdomen: man, 37, cured. Epithelioma of the cheek: man, 67, cured.

Cancer of the uterus beyond all chance of operation, much improved.

Cancer of the pylorus, woman, 63, much improved (mother and aunt died of cancer).

Cancer of the larynx: man, 56, doing well (father and grandmother died of cancer).

Cancer of the right fallopian tube: woman, 37, general condition deplorable, much improved (father died of cancer of the stomach).

I do not pretend to have given exhaustive clinical observations; I wanted simply to enumerate the cases of cancer I observed and to point out some of their most salient characters.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by W. H. Willcox, M.D., F.R.C.P., Physician to Out-Patients, St. Mary's Hospital. Subject: "The Treatment of Dyspepsia."*

ORIGINAL PAPERS.

THE PLACE OF X-RAYS IN MODERN DIAGNOSTIC METHODS. (a)

By W. STEUART, M.R.C.S., M.I.E.E.,

Physician in charge of Electrical Department, Prince of Wales's Hospital, Tottenham.

Owing to the attitude adopted to X-rays in the teaching of clinical medicine and surgery, the general practitioner is not, as a rule, aware of the full diagnostic scope of the Roentgen ray. With a view to making students sound clinicians, they are taught to rely on the older methods, and if in answer to a question a student should happen to suggest X-rays being of use in a doubtful case, his reply is received with disdain. Now that your clinical methods and habits are firmly established, I can, without fear of corruption, indicate briefly how the X-rays may be of value as regards their more important applications.

Fractures and dislocations require no comment, but almost as characteristic and easily diagnosed as a fracture are other conditions of the osseous system. Chronic and acute inflammatory affections of bone can be readily recognised, and in the former case the appearance is usually suggestive of the exciting cause. Sarcomata not only disclose their nature on the skiagram, but it can be stated as to whether the growth is endosteal or periosteal. The type of an arthritis can generally be ascertained, as the variation in shadow caused by tubercle, osteo-arthritis, syphilis (Charcot) is distinctive.

By means of the bismuth meal and bismuth enema the whole course of the alimentary canal can be accurately examined, and the following conditions made out with complete certainty:—

Œsophageal obstruction.

Lack of tonicity of stomach and degree of hypotonicity.

Gastric ulcer.

Carcinoma of stomach or pylorus.

Pyloric obstruction and obstruction of small intestine and colon.

Visceroptosis.

Bismuth has also been employed in mapping out the urinary bladder, and also for tracing the extent and direction of sinuses. Perhaps one of the most important diagnostic uses of X-rays is the detection of early pulmonary tuberculosis, and though this was pointed out more than ten years ago, and convincing proof brought forward again and again, this method even now does not receive its due recognition, but I venture to predict that X-rays, from the diagnostic standpoint only, will be one of the chief factors in the stamping out of pulmonary tuberculosis, and when this disease can be successfully dealt with other tuberculous lesions will become in consequence increasingly rare. As soon as physical signs become obvious the disease is in an advanced stage. The Victoria Park Hospital for diseases of the chest does not possess an X-ray installation, and usually some four or five cases each week of a doubtful nature are sent to us at St. Bartholomew's for examination. The majority of these are patients who have had hæmoptysis, but in whom no physical signs could be found. In such cases we have been able to detect the lesion, and, in addition, say how far the disease has advanced. In some instances the disease was so extensive that it was difficult to believe that physical signs could not be made out, but further clinical examination over the affected area rarely disclosed anything definite. The majority of these latter cases were young people from 16 to 25 in whom the apices were entirely free, the disease affecting the area surrounding the peribronchial glands.

Effusion, whether pericardial or pleural, empyema, hæmothorax, pneumothorax, pyopneumothorax, aneurysm, hydatid cyst, mediastinal new growth, all give rise to different appearances which are so definite that little difficulty is experienced in coming to a diagnosis.

Urinary calculi cast shadows, the position of which indicate whether the stone is in the kidney, ureter or bladder. Difficulty is, however, experienced with uric acid calculi, as they are practically transparent to Roentgen rays and are easily overlooked. Pure uric acid calculi are not common, but at the same time the fact that no calculus can be demonstrated by X-rays is not absolute proof that it is not the cause of the patient's trouble. However, the skiagram so rarely fails, that unless the symptoms were very definite and urgent, surgeons would hesitate to operate without radiographic confirmation. Recently examinations have been made of the pelvis of the kidney and ureter by means of injections of collargol, the principle of the method corresponding to that of the bismuth meal.

Pituitary tumours which give rise to acromegalic symptoms can be made out, not so much by the shadow they cast as by the condition of the sella turcica and clinoid processes. Unfortunately, other cranial tumours, unless of bony origin, do not cast a shadow sufficiently differentiated from that of the main skull mass to enable one to give a certain opinion.

Pus in the antrum of Highmore, frontal sinus and ethmoid cells usually give rise to a shadow which can be easily distinguished. Patients are often sent up on account of obscure brachial paralysis of various kinds to ascertain the presence or otherwise of a cervical rib. Although most of these patients do not have a cervical rib, it is curious to note that many do have very long transverse processes of the seventh cervical vertebra, and when such transverse processes are so long that their tips extend as far out as the level of the articulation of the first rib with the transverse process of the first dorsal vertebra, then they often give rise to symptoms equivalent to those caused by a cervical rib.

Obstetrical and gynæcological work is still carried on without receiving much help from the radiological department, but it may be used to ascertain the relative diameters of the pelvis in difficult cases, and suspected ovarian tumours might be skiagraphed with advantage to exclude dermoids containing teeth.

I do not wish you to infer from the foregoing remarks that diagnosis in all the conditions mentioned is perfectly easy and straightforward, without the help of the history of the case, clinical signs and symptoms. But if the radiologist is provided with all the clinical data and asked to determine which of two alternatives is right, he will rarely fail to give a correct diagnosis.

(a) Abstract of a Post-Graduate Lecture given at the Prince of Wales's Hospital, Tottenham.

A CASE OF INTUSSUSCEPTION IN AN INFANT: RESECTION AND RECOVERY.

By H. F. WOOLFENDEN, M.D. Liverpool; F.R.C.S.Eng.

Honorary Assistant Surgeon, Liverpool Royal Infirmary.

Resection of the intestine in cases of irreducible intussusception is followed by such a high mortality, particularly in young infants, that a successful case in a child three months old is worthy of record.

Makins (*a*) gives the statistics of all the cases at St. Thomas's Hospital from 1888 to 1908. Of the 27 cases in which the intussusception could not be reduced, there were only two cases which recovered, both being adults.

Clubbe (*b*) in 1905 records 100 cases of intussusception. In these resection was resorted to on seven occasions, with only one recovery.

Collinson (*c*) in 1907 reports a successful case in an infant three months old, which case shows points of resemblance to the following one.

J. D., a male, aged three months, was admitted into the Royal Infirmary on October 3rd, 1911. Prior to the present illness the patient had been a healthy baby. On October 2nd, at 12.30 p.m., the patient began to cry as if in violent pain, and he continued to whimper at intervals until admission. No fæces were passed from the onset of pain, but the mother noticed blood on the napkin. Next day she consulted Dr. Pendlebury, who sent the case to the Royal Infirmary for operation. On admission the temperature was 98° F., the pulse 160 per minute, and the child looked ill. The abdomen was tense, and any attempt to palpate the tumour caused the patient to cry. The napkin was bloodstained, and on rectal examination the apex of the intussusception was felt 1½ inches from the anus.

Operation was performed immediately, 27 hours having elapsed from the onset of the condition.

Chloroform was administered; the abdomen was opened in the middle line below the umbilicus, the incision being subsequently enlarged upwards to just above it. The intestines were very markedly distended, and could not be kept inside the abdomen. After allowing them to prolapse, the intussusception, which was of the ileo-cæcal type, was easily reduced until it was in the position of the ascending colon; beyond this it could not be reduced, and on attempting to do so the outer layer began to split.

The unreduced portion was deeply congested, and a rapid resection was decided on.

The gut was doubly clamped above and below the mass; it was then divided, the vessels ligatured, and the mass removed. Two Paul's tubes were tied in the cut ends, no attempt being made to unite the ends. Before the distended small intestines could be returned into the peritoneal cavity, a considerable portion of their contents had to be emptied. The ends of the gut were fixed in the upper part of the abdominal incision, and the rest of the wound closed with through-and-through sutures.

After the operation the condition of the child was much more favourable than the severity of the operation had led one to expect. It was able to take its bottle a few hours later. The pulse, however, continued at about 160 per minute for the three days following.

On October 16th a pair of tongue forceps with narrow blades were passed up the open ends of the bowel and loosely clamped, the area of compression being about 2 inches above the opening. The forceps were tightened each day, and were loose in a week. From this time the bowels were moved naturally, and the fæcal discharge from the enterostomy was only slight.

On October 27th the child was anæsthetised, the enterostomy closed by turning in the ends of the gut and suturing the skin and abdominal muscles over them. It reopened, however, and a second attempt was made on November 7th. This was successful except at one point, where a small fistula developed; this closed spontaneously in about 14 days.

The patient was discharged on December 5th with the wound quite healed. On discharge he looked in very good condition, being quite fat and well developed.

On examining the specimen after the operation, the intussusception was of the ileo-cæcal type; six inches of large intestine were found to have been removed; no gangrene was present, and apparently the irreducibility was due to the œdema present.

In view of this it is possible that if the attempts at reduction had been persisted in longer they might have succeeded; but it was impossible to say at the operation that there was no gangrene, and, moreover, the tear in the wall must have become complete.

No attempt to unite the two ends was made at the operation, for two reasons: first, the condition of the patient; and, second, it appeared that the only chance of recovery lay in the intestines emptying themselves freely, in order to relieve the marked distension present and to get rid of their toxic contents.

In the subsequent course a surprising feature was the little weight lost while the enterostomy was open. Another point of note was that the bowels moved naturally as soon as the clamp had made the lateral anastomosis. This apparently was due to the pouting of the mucous membrane at the enterostomy causing sufficient obstruction to make the contents of the small intestine pass through the anastomosis into the large intestine.

THE INGLEBY LECTURE
ON
PUERPERAL FEVER. (*a*)

By J. FURNEAUX JORDAN, B.Ch., F.R.C.S.,

Surgeon to the Birmingham Hospital for Women, and the Maternity Hospital.

After a few introductory remarks on the foundation of the "Ingleby Lectureship" in 1876, the lecturer said he had chosen the subject of Puerperal Fever because he felt that it was one of interest not only to obstetricians and gynæcologists, but even more to the men who are actually practising midwifery everywhere.

At first sight it might be thought that there was little or nothing even that was new to be said about puerperal fever. Every doctor knows the necessity of absolute surgical cleanliness when attending a confinement or miscarriage; every doctor knows that this cleanliness must also be extended beyond himself to the nurse, the patient, and any instruments or dressings, etc., that may be used; every doctor knows that the more thoroughly and completely this surgical cleanliness, this asepsis, is carried out, the less puerperal fever will there be amongst his patients; but every doctor knows also that however aseptic he is, whatever care he takes, some degree of infection or fever will occasionally occur.

There is no need for me to review before you all the predecessors to whose experience and teaching we owe the knowledge that we have to-day. It is quite certain that medical men never forget that whatever success they may attain to in medicine, or surgery, or midwifery, they owe for it a deep debt of gratitude to those who have gone before them.

In connection with the subject of the lecture to-day three names only do I mention—names that will occur to all of you—Pasteur, Lister, and the American physician whom most of us have learnt to love as the Poet, or the Autocrat, or the Professor.

At such a standard of uniformity, I may say of unanimity, has the teaching of puerperal fever arrived that the general public, with that avidity for which it is famous for absorbing anything which

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(*a*) Burghard's "System of Operative Surgery," 1909, vol. ii.
(*b*) Clubbe, *Brit. Med. Journ.*, 1905, p. 1327.
(*c*) Collinson, *Lancet*, 1907, p. 1087.

(*a*) Delivered at the Birmingham University on May 23rd, 1912.

concerns its physical well being, now prides itself on knowing all about it.

When the medical practitioner comes downstairs, as he occasionally has to do, to tell the husband that his wife has got puerperal fever, how often is he met, if not immediately, certainly in a day or two, by the accusing question, "How did she get it? She must have got it from something or somebody"? How often, it is only fair to add, does the doctor himself say, "No one touched her but myself, I did everything I could to preserve asepsis, but I suppose something went wrong." To this question of responsibility, or not, we shall return later on.

It is impossible this afternoon to cover the whole of the subject of puerperal fever. I propose therefore to refer to the incidence of the disease, to some of its types which are fairly distinct, to the cause or causes as far as we know them, to some of the pathological changes, and the treatment preventive and curative.

Up till quite recently there has been great difficulty here in the way of making any study of these cases, because there has been little or no institutional treatment for them. They were, and are, certainly not wanted at the Maternity Hospital. No operating surgeon has ever been anxious to mix these cases with his operation cases, but some time ago now the Women's Hospital at Sparkhill had a ward specially built for the reception of septic cases, and into this we are able to take cases of puerperal fever. We also have an arrangement with the Health Committee of the City Council by which those cases of puerperal fever reported to the Medical Officer of Health which are unable to get any proper attention at home are sent in by him to the Women's Hospital. Into this ward last year 36 cases of puerperal fever were admitted. Cases of some septic condition or other, *e.g.*, a parametritis or a pyosalpinx, ultimately following on and due to the confinement are not included in these 36. These are cases of puerperal fever coming on within a few days of the confinement. In the first three months of this year another nine cases have been admitted; of these 45 cases 15 have died, six of the 15 within three days after admission, six on days between the 7th and 14th after admission, and three on the 45th, 59th, and 55th day respectively. Even a preliminary examination of the cases shows that the first six were cases far too far gone at the time of admission for any treatment to have a chance of success; the second six were severe cases in which treatment was tried with very little effect; while the three who survived for so long were at death's door many times before they finally succumbed.

I propose to-day to dwell for a short time upon three types of case :—

(1) Those that are of a mild type and recover easily.
(2) Those that are acutely infected and die quickly.
(3) Those that are severely infected or ill for a long time, and usually but not always recover.

In considering the first class, the less severely infected or the mild type, the most noticeable feature about them is that the temperature fell to normal in all but one of them within 48 hours after admission; in the one exception the fall was a gradual one, reaching normal on the 4th day. This is really a curious fact when one considers the following information about them. There were 10 cases of this type; we will call the day of confinement in all of them the first day :—

1.	Fever	started on	7th	day,	admd.	to hosp.	11th	day	with a	temp. of	99.6
2.	,,	,,	3rd	,,	,,	,,	21st	,,	,,	,,	102.6
3.	,,	,,	5th	,,	,,	,,	7th	,,	,,	,,	101.0
4.	,,	,,	2nd	,,	,,	,,	7th	,,	,,	,,	100.8
5.	,,	,,	2nd	,,	,,	,,	4th	,,	,,	,,	100.0
6.	,,	,,	3rd	,,	,,	,,	12th	,,	,,	,,	100.6
7.	,,	,,	12th	,,	,,	,,	17th	,,	,,	,,	99.8
8.	,,	,,	3rd	,,	,,	,,	7th	,,	,,	,,	103.8
9.	,,	,,	12th	,,	,,	,,	19th	,,	,,	,,	103.8
10.	,,	,,	3rd	,,	,,	,,	10th	,,	,,	,,	99.5

The duration of the fever, therefore, extended from two to 18 days before admission, yet after admission the temperature fell to normal in all of them in practically the same time, namely, about two days. It looks as though in each case the temperature was only waiting for treatment to come down to normal. The symptoms on admission were usually the rise of temperature that I have already mentioned, quickening of the pulse to 100 or up to 120, but not higher; furred tongue; uterus big and tender; lochia usually profuse and foul smelling; constipation; and a general appearance of being ill. Three of the patients had a blunt curetting done the morning after admission, in two of the three some septic retained placenta was found, in the third case the uterus was clean. On admission to hospital the change from a poor, dirty little house, from inefficient attendance, from improper feeding, and in some cases from actual neglect, to a comfortable, warm, clean bed, and to good nursing and feeding, the change from the constant worry and anxiety at home to the general sense of well being and comfort in the hospital, the change from constipation to a thorough evacuation of the bowels, the change from dirt to absolute cleanliness, helped usually by a gentle antiseptic vaginal douche, and a tonic such as the mist. ferri seems to have been sufficient for a rapid recovery in these cases. We can only assume that the infection is slight, in some cases purely local, and that the resisting powers of the patient only want a little help to bring about a recovery.

I shall deal later on more fully with the actual cause of puerperal fever, but you will let me refer here briefly to the question of infection. The bacteriological definition of infection is the access of living virulent pathogenic bacteria to a region whence their toxins may act on the tissues of the body. It is well known to all of you that when infection occurs, recovery depends on the degree of immunity possessed or acquired by the patient. In these mild cases we simply help in the development of such a degree of resistance as will make them not only immune to further infection, but will enable them to sterilise or destroy the infection already present.

We now come to the second type of case—the acutely infected that die quickly. Early onset of the symptoms, a rise of temperature to 103 or 4 or 5, profuse sweats, a pulse of 120, and rising as high as 160, are sufficient to cause grave anxiety. In some of these cases the patient, however, looks fairly well, and except for feeling hot she may be quite comfortable, the pulse has a good volume, the bowels may be acting (but this usually only from treatment), the abdomen is slightly distended but quite soft, palpable, and free from tenderness, there is no uterine tenderness, there is nothing abnormal to be felt in the pelvis, and one may be inclined to give a hopeful prognosis. In reality the prognosis is very grave; the pulse gets weaker and weaker, the tongue becomes furred, and dry sordes appear on the lips and gums, the nourishment taken becomes less and less, rigors may or may not occur, prostration becomes more marked, the distension of the abdomen increases, constipation gives way to septic diarrhœa with involuntary evacuation, and the patient rapidly sinks from acute toxin poisoning. The rapidly fatal cases at Sparkhill were all in the latest stages of acute infection on admission, and it was impossible to render them immune to the infection; but that these cases are not necessarily fatal, and that they are not naturally bound to follow the distressing course I have briefly outlined, is known to all of you, and is well illustrated by three cases I have seen recently outside the hospital. The history of these cases is as follows :—

(1) Mrs. F., patient of Dr. Middleton. Confined on November 28th last, normal confinement, baby weighed 6 lbs. 15 ounces. Temperature rose to 103 on the 3rd day, the uterus was washed out with an antiseptic douche, a turpentine enema was given, and the temperature fell to 101. Vaginal douches were subsequently given, the bowels were kept open and tonics were administered. The patient felt better, and for four days the temperature hovered between 99.6 and 101.5. On the 8th day she had a rigor, the temperature rose to 105, and she felt very ill. I saw her with Dr. Middleton, and under an anæsthetic I took two swabs from the interior of the uterus for subsequent bacterial investigation, and also by exploration satisfied myself that the interior of the uterus was empty from any placental remains. After the rigor the temperature fell the next two days to normal, only

to rise on the third day after the rigor to 103. In the meantime Dr. Mackey had examined the swabs, and reported a profuse and practically pure infection of streptococcus. Of the vaccine he prepared from this 5 minims (containing nearly 30 million streptococci) were injected; in 24 hours her temperature came down to normal and never rose again. A second injection of 35 million was given four days later.

(2) Mrs. H., patient of Dr. L'Estrange Burges. Normal confinement on February 29th last, the temperature normal, and patient going on well till the seventh day, when her temperature rose to 104. I saw her with Dr. Burges, and carried out the same procedure as in No. 1, but in addition injected her with 4 minims of the stock vaccine of No. 1—that is, with 25 million streptococci; her temperature fell to 101 in the next four hours, but hovered between 101 and 102 for the next two days and then rose to 103, when she had an injection of 25 millions streptococci in 5 minims of her own vaccine prepared by Dr. Mackey from the swabs I had taken. Her temperature came down again to 101 for two days, and then rose to 104, when she had 50 million of streptococci in 8 minims of her own vaccine injected. In less than 24 hours her temperature fell from 104 to normal, and never rose again.

(3) Mrs. F., patient of Dr. Cochrane's, of Bloomsbury; second child; normal confinement. Three days later temperature rose to 104.2 with pulse of 144. When I saw her she presented the usual signs of an acute infection in the early stages. Since the patient was hardly able to afford the preparation of her own vaccine, a stock vaccine of the streptococcus prepared by Dr. Mackey from a previous case was used—25, 30 and 35 million streptococci being injected every third day. After the second injection her temperature came down, and never again gave any cause for anxiety.

Now these cases when first seen, especially No. 2, resembled in every way the cases which at a later stage have been admitted to Sparkhill only to die in a very short time.

I would note here that in these private cases treatment by vaccines, etc., was begun early in the disease, whereas in the six cases at Sparkhill that died within two or three days of admission they were only admitted to the hospital on the 3rd, 4th, 4th, 10th, 6th and 5th days respectively of their illness. In addition to the vaccine treatment in the three cases outlined, attention was paid to the bowels, suitable diet was administered, tonics given, and all of them had the benefit of good nursing. It is, of course, impossible to say for certain that with the ordinary measures of treatment, and without the vaccine, they would have developed the later symptoms such as those of the rapidly fatal cases at Sparkhill, but one cannot overlook the fact that in each of them a rapid and permanent recovery from a very serious condition followed this treatment. Before we leave these acutely infected cases, we must refer here briefly to the pathological changes found in them on post-mortem examination, and we shall derive most instruction from these if we take three or four cases in detail:—

(1) Mrs. L., æt. 28; five previous pregnancies; no miscarriages. Admitted to Sparkhill on May 5th of last year with a temperature of 105, pulse 130. Delivered eleven days previously by a midwife. Two days after delivery she had an attack of acute abdominal pain for which the doctor was sent for, vaginal douches were given and medicine. On the next day she had three rigors. The pain and the rigors continued until her admission to the hospital on the 12th day, when she was acutely septic and very ill, a most offensive vaginal discharge, no definite abdominal symptoms. On May 7th, two days after admission, Dr. Edge took swabs from her uterus and did a blunt curetting. On the next day her temperature was 101.6 in the morning, but in the evening she had a rigor and her temperature rose to 105.6; she had an injection of stock vaccine (25 million streptococci) and her temperature fell to 103 till the next evening when it rose again to 105. A second injection of stock vaccine was given, this time 30 million streptococci; her temperature came down for a few hours to 100, but rose on the next evening to 105.4, when she died. Dr. Mackey's report on the swabs showed an infection of streptococcus and bacillus coli. A mixed vaccine was prepared, but as the patient was near the end when it was ready it was never injected.

Post-mortem.—Body emaciated, no general peritonitis but some purulent fluid in the pelvis; uterus large and flabby, like an empty bladder, and containing some old blood clot, but not offensive nor obviously septic; the fallopian tubes contained pus, the left one being quite distended and the pus escaping from the fimbriated end when the tube was handled; no thrombosis in the pelvic veins; kidneys large and pale; spleen large, about ten ounces; liver honeycombed with gas bladders and the wall of the intestine emphysematous in parts, evidently from a gas-producing bacillus; lungs œdematous; heart extremely flabby, no endocarditis.

Mrs. H., admitted to the Women's Hospital under Dr. Martin on February 19th. Delivered eight days previously by a midwife who examined the patient several times before delivery. Placenta expelled without any difficulty. On the second day the patient felt very ill and feverish, having a rigor which lasted a long time, and two days later a doctor was called in who curetted her. She, however, continued feverish and shivering until the eighth day, when she was admitted with a temperature of 104.8, pulse 140, tongue dry and furred, abdomen tender and distended, uterus tender and somewhat fixed by a tender swelling to the right of the cervix. The interior of the uterus was bluntly curetted without an anæsthetic and swabbed with pure carbolic, and left with an iodoform gauze drain. Swabs of the uterus were taken before she was curetted, and report showed infection by streptococcus, but a streptococcus not the same as that found in other puerperal cases. A vaccine was prepared, but the patient died before it was ready for injection, her temperature rising the day after admission to 105.4 when she died.

Post-mortem.—General peritonitis, some purulent fluid in the pelvis and fibrino-purulent adhesions everywhere; uterus flabby, very friable, contents green and dirty with blood clots and (?) placenta; the broad ligaments infiltrated, and on cross section honeycombed with pus; the fallopian tubes, though not much dilated, contain thick yellow pus; the kidneys are congested, their pelves dilated and they look moderately fatty; liver large and fatty degeneration; spleen large and soft; lungs congested; heart dilated, no endocarditis.

(3) Mrs. E., æt. 22; married 16 months; confined on December 18th, normal confinement. On Christmas Day acute pain in the abdomen, and on the next day diarrhœa and sickness, which persisted profusely for 24 hours. When seen by Mr. Hewetson, on December 27th, was very ill and acutely septic with a pulse of 140; she was given a morphia suppository which stopped the diarrhœa, and was admitted to the Women's Hospital on December 29th. Great pain in the abdomen, chiefly just below the costal margins when taking a deep breath; the sickness was better, there was albuminuria but no pus in the urine, was very emaciated, suffering countenance, tongue dry in the middle, heart and lungs normal, some distension of the abdomen with general tenderness, uterus tender but fairly well involuted. She had two enemata on the night after admission with fair results. In spite of treatment she gradually got worse, and died on January 3rd.

Post mortem.—Body pale and thin. Abdomen: general fibrino-purulent peritonitis from the pelvis to the diaphragm; uterus empty and not obviously septic, nothing wrong with the tubes, no purulent pelvic cellulitis; kidneys fair; liver large, and fatty degeneration well marked. Thorax: Pericardium contains 6 or 8 ounces of thick pus; heart flabby but no endocarditis; a recent pleurisy over the left lung, which is collapsed, no effusion and no abscesses in the lung, right lung adherent in several places, no abscesses, no pleural effusion.

(4) Mrs. S., æt. 26, fourth confinement on September 3rd last year, normal, attended by a midwife. On the second day after confinement had a rigor, became rapidly ill, and was seen by a dispensary doctor on

September 7th. I saw her with him on the same day. I found her in the midst of the filthiest and most poverty-stricken surroundings, and lying covered where the skin was exposed by myriads of flies, of which she took not the slightest notice: pulse 148, temperature 104; abdomen distended and tender in the lower part; uterus and broad ligaments very tender; respiration hurried and very difficult. I admitted her to the Women's Hospital at once. She never recovered complete consciousness; her temperature varied from 103 to 105.8, septic diarrhœa supervened, with rapid prostration and death five days after admission.

Post mortem.—Abdomen contained a few ounces of fluid but no pus; intestines and stomach were much distended with gas; uterus pale, rather large and soft, its cavity empty and not very septic looking; in the wall of the uterus there were one or two small abscesses; from the left broad ligament pus was obtained by squeezing, and the left tube contained some semi-purulent fluid; the pelvic veins were not thrombosed; the spleen was large and septic; liver large, very soft, and fatty degeneration, but no abscesses were seen; the kidneys were pale, large; cortex swollen and very fatty; kidneys typical of septicæmia. Thorax: In both pleural cavities there were some ounces of semi-purulent fluid; both lungs showed purulent lymph on their exterior, and both on section showed well-marked œdema and septic pneumonia; the substance of the lungs was very friable, and in both there were numerous small abscesses; the pericardium contained a slight excess of semi-purulent fluid, and there was early pericarditis noticeable on right auricular appendix; the heart muscle was pale and fatty, and the cavity showed a large amount of septic-looking clot; the mitral valves showed a few recent small vegetations, and the aorta some aortitis of the aortic sinus.

Reference has already been made to those cases that, although acutely infected and very ill, were in hospital for a long time and ended usually in recovery. If the histories of these cases are not becoming wearisome to you I would like, as briefly as possible, to record some of these.

(1) Mrs. H., æt. 27. Admitted to hospital November 15th, baby born on November 9th. Examined once before the membranes ruptured by the nurse attending her, but at the actual birth of the baby no one was present except a neighbour. Dr. Sangster was called in to remove the placenta. Followed later by profuse hæmorrhage, had a rigor same day, but after this felt well until the third day. On the first day she and her bedclothes were wet through by the rain coming in through the roof. On the third day began to feel hot, and her temperature remained high until she was sent to the Women's Hospital on November 15th with a temperature of 105, pulse 144. On admission abdomen slightly distended, no tenderness, uterus above the brim, profuse septic discharge, tongue furred, patient very anæmic. Next day, on the 16th, the temperature came down to 103 and her pulse to 118; blunt curetting was done and some small fragments of membrane got away. Before the curetting was done, two sterile swabs were taken of the uterine discharge from which to grow cultures; these cultures showed streptococci and bacillus coli. The temperature did not fall until the third day, when it came down to 101.4. On the evening of the third day she had an injection of her own vaccine, 4 minims. On the fourth day temperature came down to 100.2, but on the fifth, sixth and seventh days rose again to 102, 104 and 103. On the seventh day she had another injection of vaccine, 5 minims. Between then and the 13th day her temperature was down in the morning to 99.2 and twice to normal, but up in the evening to 102, and on the twelfth day to 103. On the thirteenth day another injection of vaccine, 6 minims, was given, after which her temperature hovered above normal day after day for a fortnight. She had two more injections of vaccine, 8 and 9 minims respectively. The next week the temperature was higher in the evening than the previous fortnight, though down to normal in the mornings, and it continued very much in this condition until the forty-ninth day. During all this time the patient complained of pain in the wrist, pain in the legs, and especially in the left ankle; the joints were swollen slightly, acutely tender, but as time went one both the swelling and the tenderness gradually disappeared except in the left ankle, where a swelling persisted and the tenderness remained acute. Repeated examination of the chest, of the abdomen, and the pelvis failed to elicit any cause for her temperature, the serous effusion round the ankle joint not being sufficient to account for such an irregular temperature. On the fiftieth day a slight tenderness and swelling was noticed over the back of the sacrum, and on the next day the swelling had increased considerably. An incision was made into it and a large quantity of pus let out. Her temperature fell the next day to normal. Her recovery from this time onwards, though very slow, was steady. Massage to the left leg and ankle helped her to gradually recover the use of the leg, and for a week before she was discharged to the Convalescent Home she was able, with some assistance, to put her foot to the ground and to hobble about.

This, with the case of Mrs. D., the third case I shall describe, are both examples of infection in which quite late in the course of the disease a local abscess forms, the opening of which seems to put an end to the invasion of the tissues by the germs, and to allow of the immunity which they gradually acquire to take effect.

(2) Mrs. T., æt. 28. Delivered at her home on October 31st at 10 a.m. Fifth pregnancy. The nurse arrived 8.30, membranes ruptured 9.15, some difficulty in delivery from the size of the head and shoulders. Baby was asphyxiated, and while it was being attended to the placenta was expelled—not intact. After the third stage rather more than the normal loss. On November 2nd temperature was 101 and pulse 120 when the nurse visited her; the bowels had not been moved, and an enema was given. On November 3rd temperature still up, and admitted to Sparkhill at 7 p.m. with a temperature of 102.6, pulse 132. Two intra-uterine swabs were taken and sent to Dr. Mackey. Cultures showed streptococci, and a vaccine was prepared. For two days after admission her temperature came down to nearly normal, but a smelling, purulent, bloody discharge persisted; so on the fourth day after admission a blunt curetting was done, and a largish piece of septic placenta was removed; her temperature rose to 102.5 on the same evening. The next morning she had an injection of vaccine, 2 minims; that was on the second morning. Temperature kept up till the fourth morning, when it began to fall, and fell in 24 hours to normal, and kept so for two days. Sixth day, injection of vaccine, 3 minims. On the seventh day temperature rose to 101, and remained irregular, up and down, until the thirteenth day. On the tenth day, up to which she had looked and felt well, she complained of pain in the left side of the chest. On examination of her chest I could find slight impairment of the breath sounds at both bases and diminished movement of the left side of the chest. Pain passed off, and patient seemed well till the twenty-first day, when complained again of pain in the left side in the lower axillary region and in the left shoulder, especially marked at end of inspiration. On the twenty-first day —*i.e.*, November 27th—she was examined by Dr. Mackey. Movement of left chest much diminished, resonance impaired in front and duller still behind, especially at the base, where the breath sounds were very weak, but breathing not bronchial, though expiration heard better than inspiration. Vocal resonance resembled ægophony, and there was whispering pectoriloquy. No pleural friction heard, right side normal. On November 28th, or twenty-second day, 6 minims of vaccine, but her temperature remained irregular, between 99.5 and 102. On December 3rd the dulness being more marked and increasing, the chest was aspirated; no fluid found. On December 7th aspirated again and found fluid and drew off two

pints of straw-coloured, slightly thickened fluid, after which, from the 6th to the 16th, her temperature was still up at night and down in the morning, varying from normal to 100 and 100.5. The aspirator was used again on the 16th, and between three and four ounces more fluid were drawn off. The fluid contained chains of streptococci similar to those of the uterus. Injections of vaccine on December 2nd, December 7th, December 12th, and December 19th were given, increasing the dose by 1 minim each time, but with no effect on the temperature until after the second aspiration, after which her temperature rose twice on 18th and 19th to over 100, but afterwards remained normal till December 31st, when she went home feeling quite well, and has remained so. On December 30th Dr. Mackey reported left chest somewhat dull, air entry poor, but breath sounds better heard than formerly and vocal resonance fairly good. Aspiration in two places, no fluid. Patient all along looked fairly well in spite of her high temperature and quick pulse and effusion into the pleura.

(3) Mrs. D., æt. 31, eighth pregnancy. Admitted January 21, 1912, to the Maternity Hospital and confined in the evening of the same day. Before admission to the Maternity Hospital she was examined by a midwife and by a doctor. Presentation transverse. On the 20th, at 1 p.m., the membranes ruptured but no pain; at 11 p.m. a limb presented, and the doctor who was called in sent her to the hospital. She was admitted at 4 a.m. on the 21st. Examination on admission showed an arm presenting, there were no pains, and at 6 o'clock in the morning Dr. Potts did internal version by bringing down a leg. The patient had no more pain till 5 p.m., when sharp rapid pains came on and the baby was quickly born; placenta delivered in half an hour (manually). An intra-uterine douche was given. At the end of labour the pulse was 86. There was no tear of the perineum.

January 22nd. Pulse 96, temperature 100.5. Patient complained of pain in the right wrist. Vaginal douche twice a day.

On the next day the temperature was higher—over 101.

The next day it went up to 103, and she complained of great pain in the right wrist and both legs. No swelling of the joints, which appeared freely movable. Very wheezy in the chest, harsh breath sounds all over the lungs. Lochia offensive and scanty.

The next day temperature 102. An intra-uterine douche was given, cultures taken from the uterus, and Dr. Thomas Wilson curetted her. A great deal of clot and *débris* came away. The same night 20 c.c. polyvalent anti-streptococcic serum given in the abdominal wall.

The next day patient seemed a little better, but still the pain in the wrist and the legs. The gauze packing of the curetting was removed and a douche given.

Cultures grown showed streptococci.

Two days later, on January 26th, temperature still up to 102, lochia still offensive, two rigors in the morning, uterus flushed with 5 per cent. hydrogen peroxide.

January 27th.—Much the same, cough more troublesome, at left base behind the percussion note is impaired, few crepitations and a pleuritic rub can be heard sometimes.

January 28th.—Condition the same, abdomen rather distended but no tenderness, uterine discharge clear, sputum shows pneumococcus. Patient had two rigors yesterday.

January 29th.—Much the same.

January 30th.—Patient still holding her own, moist crepitations, pleural friction over the left base. Slight rigor this morning.

January 31st.—Patient's aspect not so good, pulse becoming more rapid, abdominal distension increasing.

February 1st.—Still a good deal of distension, tenderness in the pelvis, sputum bloodstained, and a tender spot over the left buttock.

February 4th.—Patient had a rigor yesterday afternoon; temperature 104.8, still feeling the effect of it to-day.

February 5th.—Condition much the same, left base still dull, breath sounds deficient, abdomen not tender and the spot on the left buttock less so.

February 6th.—An abscess in the left buttock was opened and four ounces of thick pus let out. Cultures of pus showed streptococci and bacillus coli. Left base still dull.

Patient continued about the same, and examination on February 12th showed that the uterus was involuted and no hardness or tenderness in either fornix, breath sounds rather deficient in the left base, nothing else abnormal.

During the next week she had several rigors, and on February 19th she complained of pains in the right leg below the knee, leg tender to the touch and looking larger than the other.

February 23rd.—Leg rather better, otherwise much the same. All this time her temperature was going up and down between 103 and normal.

February 27th.—Patient was given Burney Yeo's inhaler with creosote inhalation.

February 28th.—Half a grain collargol injected into basilic vein; left base behind still dull, breath sounds deficient.

February 29th.—Condition much improved, temperature having been practically below 100 for three days.

From now till her discharge a month later, on March 28th, the collargol was systematically administered. The patient progressed almost imperceptibly at first, but afterwards steadily and rapidly, and when she left to go to the Convalescent Home she was able to walk, and the wound in the back had quite healed.

(To be concluded in our next.)

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Wiring Fractured Patella.—Mr. Willmott Evans operated on a man, æt. 45, who had been admitted suffering from a fractured patella. The patient had fallen and struck his knee against an iron plate, and had then been unable to rise. On admission there was an obvious fracture of the left patella, a space of about an inch intervening between the two fragments. The fracture was transverse and the knee-joint swollen. The patient was kept in bed for a week, the limb being placed on a back splint. The operation was performed on the ninth day after the injury. The patient was anæsthetised with ether, and the operation area painted with a 2 per cent. solution of iodine. Then a horse-shoe incision was made with the convexity upwards, starting at one side opposite the tuberosity of the tibia, and passing upwards and across the limb at a point about an inch above the upper border of the patella, and then downwards to a corresponding point on the opposite side. The flap thus marked out was turned downwards and the fractured bone exposed. The two fragments were found widely separated, and there was much blood clot and serous effusion in the joint. The clot was removed with the finger, then the overhanging torn aponeurosis was cut away with scissors. A hole was next bored with an awl through each fragment, passing from the anterior surface about half an inch from the edge of the fracture to about the centre of the fractured surface. A piece of silver wire was then passed through the opening from one fragment to the other, and by traction the two fragments were thrown into apposition. The ends of the wire were then twisted round one another so as to make two revolutions, the excess of wire was cut off, and the twisted ends were gently hammered on to the bone so that no rough edge was palpable. The torn aponeurosis was stitched here and there with silk. The skin was sewn up, no provision being made for drainage. The edges of the wound were wiped over with the same solution of iodine, a gauze dressing was applied, and the limb placed on a back splint.

Mr. Evans said that it is generally stated in the text-books that the transverse fracture of the patella is due to muscular action, while direct violence is said to produce a stellate fracture. While these statements are on the whole true, it is certain that it is not at all rare for direct violence to produce a transverse fracture, as in this case. When direct violence causes a fracture without rupture of the aponeurosis there is no separation of the fragments, the fracture being usually stellate, and wiring is not necessary; but the treatment for ordinary cases of fracture of the patella should certainly be wiring. The only exceptions are cases in which the age or the general health of the patient renders the operation undesirable. The incision employed in this case appeared to him to be the best. When the late Lord Lister first wired the patella he employed a vertical incision, but it is well, Mr. Evans thought, to keep away the incision in the skin from the neighbourhood of the fracture. It is always necessary to cut away the portions of the torn aponeurosis which overhang the fractured surfaces, for they may materially interfere with union. The exact method with which the wires are inserted, he considered, matters little, the only essential point being that the fractured surfaces are brought together and kept in good apposition. The wire may surround the patella or it may be inserted as in the operation he had just performed, but it is important that it should not encroach on the articular surface. If the operation has been performed with full antiseptic precautions there can be no need to drain the wound; in fact, the drainage tube itself may form a channel for the admission of germs to the wound. It is desirable, he pointed out, to keep the limb on a back splint until the patient has fully recovered from the anæsthetic, but then it is better removed, for there is no fear that the patient will move the joint too much, and the absence of the splint will hasten the return of mobility to the limb.

The patient was kept in bed for a month after the operation, and for the latter half of this period massage was daily employed. When the patient left the hospital six weeks after admission, he could walk as well as before the accident, possessing full power of flexion and extension of the knee.

TRANSACTIONS OF SOCIETIES.

THE NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held Thursday, June 13th, 1912.

The President, Dr. P. S. Abraham, in the Chair.

Dr. **Tom Robinson** showed (1) a man, æt. 46, with a severe attack of generalised, eczematous dermatitis, which had lasted for about five weeks with much irritation. Twelve years ago he had a similar attack. There was some tendency to dryness of the skin, and some of the glands were enlarged.

The **President** remarked upon the multiple causation of these cases, and recommended mild antiseptics and emollients in their treatment.

Dr. **David Walsh** thought that many of the typically recurrent cases were frequently associated with the presence of a cardiac murmur. In the present case the pulse was compressible, and the heart sounds were weak. Defects of the circulation, acting in conjunction with changes of external temperature, might well be responsible for the cutaneous eruption.

(2) A case of alopecia areata in a child, æt. 10.

Dr. **Walsh** showed (1) a woman, æt. 65, with keratosis follicularis best marked upon the buttocks and thighs. There was considerable irritation of the affected parts, and the skin elsewhere showed some signs of senile degeneration. Her general health was good.

The **President** remarked that lichen pilaris, of which this was an exaggerated form, was common upon the lower limbs, but it was impossible to say why it should commence at this age.

(2) A microscopic specimen from a case of chronic eruption upon the pubis in a young man who had been out in San Francisco. The patch was reddened, and had become moist at times. The exact nature of the fungus obtained by scraping was not ascertained, as it could not be cultivated, but it consisted of short, budding elements, no mycelium being visible. The only case at all resembling this that the exhibitor could find an account of was the one reported by Dr. Whitfield. *(Brit. Journ. Derm.*, 1908, p. 274.)

Dr. **Norman Meachen** showed a girl, æt. 9, with chronic eczema of the face that had existed since the age of six months. At one time she was in a children's hospital with the disease in the bends of the joints. There was quite an appreciable amount of infiltration present, and part of the facial eruption was not unlike a lupus clinically, but no nodules were seen. The child's health was good, and there was no history of consumption in the family. Up to the present, the disease had proved peculiarly resistant to treatment.

The **President** said that he would try the compound petroleum ointment combined with glycerine of starch in this case.

The question of the removal of any adenoid growths that might be present was discussed by several of the members.

Dr. **D. Vinrace** showed a young woman with psoriasis of some years' duration, in whom an acute attack of pityriasis rosea had supervened. The characteristic lesions of the latter condition were strikingly manifest upon the trunk, some of them showing up well in contrast to the older patches of psoriasis.

The **President** gave a short *résumé* of our present knowledge of pityriasis rosea, and he recommended mild sulphur applications.

Dr. **H. Samuel** drew attention to the similarity of the affection to an exanthem, especially as regards the apparent immunity conferred by one attack.

Dr. **Walsh** agreed that it was a self-limited affection, running a definite course, although no organism had been found.

Dr. **Agnes Savill** thought that the duration was often very variable, and that it was sometimes followed by urticaria.

Dr. **J. D. P. McLatchie** showed (1) a young woman with a palmar syphilide affecting both hands. The condition was improving under appropriate treatment.

(2) A woman with typical scarring around the mouth as the result of late syphilis.

Dr. **R. W. Brimacombe** exhibited a young woman, æt. 27, with curious, irregular patches of brownish-yellow pigmentation upon both cheeks and also upon the chest. The condition began upon the face two years ago. The catamenia were regular, and there was no uterine disease. Her general health was good. The patient had rather dark hair and eyes.

Several members remarked upon the similarity of the pigmentation to that of the chloasma of pregnancy, and all were agreed as to the interest of the condition, which did not appear to be easily explicable in the present case.

THE ROYAL SOCIETY.

Meeting held June 27th, 1912.

The following is an abstract of the paper and conclusions by A. W. **Porter**, F.R.S., and F. W. **Edridge Green**, M.D., F.R.C.S., on

NEGATIVE AFTER-IMAGES AND SUCCESSIVE CONTRAST WITH PURE SPECTRAL COLOURS.

A definite portion of the retina was fatigued by steadily gazing at an isolated region included between two definite wave-lengths in the Edridge Green colour perception spectrometer. After the fatiguing light had been viewed for a period of about 20 seconds, the eye was turned to a screen on which a spectrum was situated, so that the after-image formed a band running right across the spectrum on the screen and occupying its centre. Experiments were also made with the spectrum replaced by monochromatic bands and on the appearance of the sodium flame after fatigue to various colours.

The first point which was evident was the very great importance of the intensity of the light which was used, especially in relation to the reacting light.

(1) Very little effect was produced, except when the intensity of the reacting light was the same or less than that of the fatiguing light.

(2) The effect was chiefly noticed on the less luminous portions of the spectrum; for instance, after fatigue for yellow there was very little effect in the yellow, but considerable effect in the violet.

(3) The after-image is not surrounded by the primary colour.

(4) The effect of fatiguing the eye with a monochromatic region produces a uniform grey band across this region, when both fatiguing and reacting lights are of the same intensity.

(5) The after-image does not change colour on fading.

(6) Violet was the most affected after fatigue for red.

(7) An after-image is seen in the absence of all external light.

(8) Except after fatigue by a very bright light, as, for instance, direct arc through coloured glass, yellow does not change to green after fatigue to red, or to red after fatigue to green.

The same is found with the sodium flame, though the after-image was strongly marked on each side of it.

(9) The after-image, even in the absence of all external light, is always darker than the surrounding visual field.

(10) The complementary to the exciting light is never strengthened in the spectrum on the screen by the after-image.

These facts cannot be explained on either the Hering or Young-Helmholtz theories. The explanation on the Edridge-Green theory of colour-vision is the the same as that given for other facts of simultaneous contrast.

SPECIAL REPORTS.

THE INFLUENCE OF RECENT RESEARCH ON THE TREATMENT OF SYPHILIS.

A discussion on this subject took place recently at the Seventh International Congress of Dermatology and Syphilology, held at Rome, April 8th to 13th, 1912.

Professor Neisser (Breslau), in opening the discussion, remarked that syphilitic infection can be diagnosed by the presence of the spirochæte and by serum diagnosis, even in the absence of definite clinical symptoms. It is experimentally proved that the spirochætes have generally spread in the body before the chancre is clinically appreciable. Experimental research has shown that in diseases caused by trypanosomes and spirochætes, a complete cure is more easily attained the earlier treatment is commenced. In the case of syphilis, treatment should be begun as soon as possible after the diagnosis is confirmed, with the object of effecting a radical cure. In doubtful cases the spirochæte must be looked for and the serum tested. But, treatment may also be commenced without a definite diagnosis (under certain conditions, such as that of married men), for it is possible by means of repeated serum diagnosis to distinguish between latent syphilis and cure of the disease, even in the absence of visible symptoms. It is impossible to prove that syphilis leaves any real immunity after cure; reinfection may take place in both animals and man, and the second attack may follow the same course as the first. On the other hand, generalised syphilis, especially in the first years of infection, causes a high degree of resistance of the skin to fresh infection. However, by energetic inoculation with material rich in spirochætes, this resistance of the skin may be overcome and superinfection occur. Before syphilis has become constitutional (in the first weeks after infection) inoculations, either with autogenous or heterogenous virus, may produce new chancres. Again, after several years, when the disease is on the way to cure, inoculation may also give positive results when made in a region which is not influenced constitutionally. Thus, superinfection only occurs under certain special conditions. Tissues not yet infected and impregnated with the virus react like primary infection; tissues affected with secondary, tertiary or malignant syphilis present corresponding products of superinfection. However, in advanced tertiary periods the products of inoculation may closely resemble primary sores; this may be due to return of the normal reactive power of the tissues. As regards serum therapy, no method of passive or active immunisation has yet been discovered; but the researches of Kraus and Spitzer seem to show that immunising treatment is possible. It is also possible that immunisation may be attained by means of pure cultures of spirochætes, provided that these microbes can be cultivated with certainty and in sufficient quantity. At whatever time after infection treatment is begun (preventive before propagation of the spirochætes, or abortive as soon as possible after generalisation), general treatment should always be carried out. Serum diagnosis is essential in treatment, because the clinical symptoms do not give sufficient evidence of the state of health of a person infected with syphilis. A positive reaction is a proof of infection, a negative reaction, although of less value, gives important information as regards diagnosis and treatment. Serum diagnosis has shown that the usual treatment of syphilis has hitherto been generally insufficient. This accounts for the frequency of post-syphilitic affections, and also for the rarity of re-infection. Treatment should not only aim at the disappearance of clinical symptoms, but also at the production of a permanent negative reaction. General treatment should, therefore, be as energetic as the patient can support, for the therapeutic action depends on the quantity of the medicament introduced into the organism. Injections are preferable to inunctions and internal medication, because they cause less harm to the body. The true anti-syphilitic medicaments which have the power of killing spirochætes are: (1) Mercury; (2) atoxyl, arsenophenylglycin, and salvarsan; (3) antimony. Iodine and quinine are much less certain. As regards human therapy, atoxyl is contra-indicated on account of its affinity for the optic nerve. Mercury, arsenophenylglycin and salvarsan are the most powerful remedies. As regards antimony, there is no evidence as to human syphilis, but it has a spirillicidal action in animals. Although both mercury and salvarsan may cure syphilis after sufficiently energetic application, it is better to combine them. Combined treatment by mercury and salvarsan has the following advantages: (1) While the dose of each drug is non-toxic, the combined effect has a powerful action; (2) certain spirochætes are affected more by mercury and others more by arsenic; (3) the manner in which mercury and arsenic attack and destroy the spirochætes is different. By the addition of antimony the combined treatment may be rendered still more powerful. If it cannot be actually denied that Ehrlich's *therapia magna sterilisans* is possible and realisable in practice, we should, nevertheless, treat syphilis by a method consisting, on the one hand, of active spirillicidal drugs, and on the other hand, of less active drugs which hinder the multiplication of spirochætes. But, in any case, the spirochætes should remain in contact with these drugs for a year or more. If, in the course of the first year a negative reaction is established, treatment may be mitigated, but not left off. Cases of late syphilis, with or without tertiary symptoms, but with a positive reaction, require intensive treatment, because it is more difficult at this period to transform a positive into a negative reaction. The reason of this is unknown; it is possibly due to encapsulation of the spirochætes, or to the presence of these in the form of spores, either of which conditions would oppose mechanical obstacles to the action of drugs. Hence the idea of combining spirillicidal drugs with hydrotherapeutic methods, iodides, &c., with a view to break down the barriers which oppose the action of the drugs. In conclusion, Neisser gives an outline of the treatment he adopts: (1) Begin treatment as soon as possible; (2) use large doses of "606," several times repeated, intravenously; later on in combination with three or four intra-muscular injections of arsenophenylglycin (0.30 to 0.50 grams weekly); (3) combine this with energetic mercurial treatment by gray oil injections or by injections of asurol; (4) continue treatment for a year at least. After this energetic treatment, Neisser says he rarely sees "neuro recurrences," the toxic nature of which he says has not been demonstrated.

Professor **Hallopeau** (Paris) advocated the abortive treatment of syphilis, which he thought was possible within 30 days after the first appearance of the chancre. For this purpose, he recommended local injections of *hectine* (20 centigrams) in and around the chancre, combined with intramuscular injections of soluble mercurial preparations repeated daily for 30 days.

Dr. **Milian** (Paris) was of opinion that syphilis might be aborted by the above method, and also by salvarsan. With regard to the latter drug, he reported the results of 27 cases treated in the primary stage; 6 of these have shown no sign of secondary syphilis after intervals of 12 to 17 months, and one of these contracted syphilis again (re-infection). Milian remarks that re-infection is frequent after treatment by salvarsan; he has observed two cases after cure of the chancre, one case after secondary syphilis, and two cases after tertiary syphilis. He is also reported to have said that this frequency of reinfection is unknown after mercurial treatment. [This is quite erroneous, for numerous cases of reinfection have been reported after mercurial treatment.] He considers that salvarsan may cure recent tabes and leucoplakia, and cause improvement in older cases. He even thinks that general paralysis is benefited, because lymphocytosis of the cerebro-spinal fluid diminishes under salvarsan. Milian is convinced of the therapeutic value of salvarsan, but is of opinion that better results may be obtained by the addition of other drugs, including mercury, iodides and possibly antimony, on the assumption that spirochætes which become resistant to one drug may be destroyed by one of the others. He therefore advocates the following method of treatment: (1) Four intravenous injections of salvarsan (0.30, 0.40, 0.50, 0.60 gram) during 20 days; (2) an interval of 10 days; (3) eight injections of grey oil or calomel (0.07 gram) with eight injections of benzoate of mercury (0.02 to 0.04 gram), given alternately once a week, together with 3 grams of potassium iodide daily; (4) an interval of 10 days; (5) four injections of salvarsan, as before. As regards the criterion of cure, Milian holds that neither clinical symptoms nor the Wassermann reaction are certain, and recommends a test reaction by an intravenous injection of salvarsan (0.30 gram) with subsequent serum tests at intervals. In conclusion, he considers that the new arsenical preparations may succeed where mercury has failed, but cases of syphilis may become refractory owing to the creation of arsenic resistant spirochætes.

Professor **Finger** (Vienna) remarked that formerly the evolution of syphilis was attributed to modifications in the degree of virulence of the syphilitic virus, but recent research has shown that the virulence of the virus is generally constant, and that the variations in evolution of the disease are due to differences in the soil. All attempts to attenuate the virus have so far failed; also attempts at vaccination. The old theory of immunisation and receptivity of the organism must be abandoned. The receptivity of each organ is subject to great variations of time and place, in which the quantity of virus plays a part. This explains why an organ is sensitive to a local inoculation (large quantity of virus), when it is apparently immune to a virus injected by the blood (small quantity of virus). The same organ may present variations in receptivity, and these variations may be influenced as much by external conditions, irritation, inflammation, etc., as by treatment. The manifestations may be explained by a relatively different action of the virus, by phenomena of defence, or by the power of resistance. In every organism, animal or human, organs of different types may be present, and show multiple variations, thus explaining the great diversity in the evolution of syphilis in man and animals. In the lower monkeys, the receptivity of the skin is confined to certain regions (eyelids and genital organs), the chancre is not typical, and variations in receptivity at the point of inoculation after disappearance of the chancre account for local recurrence at the point of inoculation. On the other hand, the skin is generally unaffected by virus introduced into the blood. Of the internal organs, the spleen, medulla of bones and testicle are slightly receptive, and the other organs not at all. In the anthropoid apes the skin is receptive both to local inoculation and to virus introduced into the blood. In man, the skin reacts as in the anthropoid apes; the organs differ in receptivity in different individuals. In some rare cases there is little or no receptivity of the skin to virus introduced by the blood, associated with extreme receptivity of certain internal organs (paralysis, tabes, aortitis and sclerosis of the coronary arteries). Acquired syphilis is a disease of the tissues in which the blood transports the virus from time to time only, and thus differs from the hereditary disease, which is a disease of the blood, a true spirochætal septicæmia. The period which elapses between inoculation and infection of the blood vessels and lymphatics appears to differ in man and animals. Regional papules arising near the chancre are no doubt produced by propagation of the virus along the lymphatics and lymphatic spaces by auto-inoculation. The virus which travels by the blood is always more abundant, and penetrates all the organs and tissues, and afterwards reaches the perivascular tissue. The roseola is due to blood infection; secondary relapses to lymphatic propagation around an old syphilitic focus, which explains the corymbose grouping of the eruption. When recurrent roseola is of blood origin it resembles primary roseola; tertiary roseola is almost always due to remains of the virus which have remained latent since the primary period. Malignant syphilis is a form in which the elements have a tendency to eccentric extension and central destruction, in which latent periods between the relapses are absent and disseminated relapses occur by the blood. In these cases spirochætes are often scanty, and the Wassermann reaction negative or feebly positive. The old idea of syphilitic immunity lasting for life must be abandoned. According to this idea, the syphilitic is sensitive to his own virus, but insensitive to external virus; but clinical and experimental facts show that efforts at immunisation are always insufficient; immunity is not complete or only transitory; there is generally only a modified reaction both to autogenous or heterogenous virus. During the first inoculation the efforts towards immunity are feeble; successive chancres may result from repeated inoculations, but changes in the cutaneous reaction are shown by shortening of the incubation period and feeble development of the later lesions, which, however, are typical. During the second inoculation period the later lesions may be less typical, but sometimes in cases of auto-intoxication they are quite typical. In the secondary period inoculation of external virus may cause papules—*i.e.*, elements corresponding to this stage of syphilis. In tertiary syphilis, inoculation of external virus causes the same lesions as inoculation with autogenous virus. Hence, superinfections show that the syphilitic is not completely immunised at any period of the disease. His own virus and external virus cause the same clinical lesions, varying according to the reaction of the subject. But true reinfection may also occur, with a second chancre, regional adenitis, and roseola. Such reinfections may occur a few years or 10 to 30 years after the first infection. There is no doubt that cases of spontaneous cure of syphilis occur, but it is impossible to estimate their frequency. Examples of such cases are women infected after marriage, who suffer from gummas 30 or 40 years later, and are easily cured with iodides; also cases cured with a single course of mercury. But the more serious evolution of the majority of cases of syphilis makes it necessary to treat every case energetically, for we cannot distinguish between cases which will be benign or severe, and the statistics show that the severity of syphilis is inversely proportional to the energy of treatment. Antisyphilitic remedies (mercury, iodides and arsenic) do not appear to have a directly parasiticidal action; it is more probable that they act indirectly, either, as Ehrlich suggests, by being transformed in the body into parasiticidal agents, or by acting on the soil and rendering it less receptive,—*i.e.*, by increasing the power of resistance of the cells. The persistence of the virus in regions which have undergone energetic local treatment favours the latter view. Mercury and iodides have survived the test of time. As regards alvarsan, it is still in the experimental stage; it seems superior to mercury in certain cases, such as malignant syphilis, but it possesses a certain degree of toxicity due to arsenic. Examination for spirochætes and the facts furnished by the Wassermann reaction have modified the treatment of syphilis. By means of dark ground illumination syphilis may be diagnosed when clinical symptoms are slight and the Wassermann reaction negative. These facts bear on the question of abortive treatment, by excision of the chancre, or by energetic local treatment. The results of such abortive treatment are variable. In certain cases the symptoms of syphilis disappear, and the Wassermann reaction becomes negative. These cases are rare and may occur after mercury or salvarsan. In other cases the roseola disappears and the reaction becomes negative for six months, but after this time the reaction again becomes positive and symptoms recur, especially mucous patches of the throat, which may recur several times in spite of treatment. The Wassermann reaction may again become negative or positive, but two years after infection it remains negative. Sometimes abortive treatment only postpones the appearance of the roseola. In other cases, it has no influence on the evolution of the disease. Hitherto the intermittent method of treatment of syphilis has been based on empiricism; the Wassermann reaction is now a valuable guide, although its signification is not quite clear. The reaction is positive about the sixth week after infection, and increases in intensity up to the appearance of the roseola. During the secondary period, which persists for three or four years after infection, the reaction remains positive in most cases, but becomes negative permanently under the influence of treatment. After a relapse the reaction generally becomes positive except in relapses, which occur rapidly under treatment, and which seem more frequent since the use of salvarsan in malignant syphilis. The reaction may remain negative in spite of symptoms. After three or four years syphilis generally becomes latent, in which case there may be no symptoms and a negative reaction, or the reaction may become positive in spite of absence of symptoms. From the theoretical point of view treatment might be continued till the reaction becomes permanently negative, but it is doubtful if this object can be attained in all cases by increasing the duration and severity of treatment. The cases where syphilis has been cured without treatment or with insufficient treatment are opposed to cases of failure after energetic treatment, and if "specific" drugs only act by increasing the power of defence, it is possible that this often fails. Hence, increase in the energy of treatment should be prudent. The fact that relapses are generally due to latent microbes indicates energetic local treatment, preferably by inunctions. The diagnostic value of the Wassermann reaction is undoubted, but a positive reaction does not prove the syphilitic nature of the lesion in question. If the Wassermann reaction indicates syphilis, it gives no information on the contagiousness of the disease, and as regards the question of marriage, it is better to be guided by the clinical symptoms, the age of the disease and the previous treatment.

Professor Gaucher (Paris), referring to "606," said that it should only be employed in certain cases, chiefly in those where mercury failed. As to the sterilisation of syphilis, he did not think this possible either with "606" or mercury. As regards the Wassermann reaction, he considered that a negative reaction was no proof of cure, because the reaction may still be negative just before a fresh outbreak of syphilis. With regard to abortive treatment, Gaucher points out that more than a third of syphilitics only suffer from a chancre which heals quickly and a transient roseola which may escape notice, even with no treatment, but it is these patients who, after 10 or 12 years, come again with tertiary syphilis; hence, the rapid cure of the chancre and the apparent absence of secondary symptoms is no proof of abortive cure. He remarks: "How can we state that syphilis is cured by '606' when we have had only about a year's experience?" As regards the so-called reinoculations, he considers these to be chancriform syphilides. He regards "606" as a cicatrising agent only, not a cure for syphilis; six months or a year after its administration mucous patches and condylomata frequently appear, just as they do after three months in untreated cases. In conclusion, he considers "606" an active medicament, and hectine less dangerous but less active; but, like all arsenical compounds they are exceptional drugs. Mercury is and should remain the fundamental treatment of syphilis.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, June 29th, 1912.

At the Hufelandische Gesellschaft, Prof. Strauss gave a report on the

Treatment of Diabetes by Inulin.

He was led to this by a recommendation to give to diabetic cases vegetables rich in that substance, as in some cases not only were the vegetables well borne, but it had been observed that their use had a tendency to diminish the excretion of acetone. An inquiry then made induced the speaker to go into the matter still further, more especially as there was but little in literature to lead him to suppose that the subject was one into which much inquiry had been made. No systematic investigation had been made into the relations between inulin and acidosis. He therefore made use of the preparation in nine cases of diabetes, in five of which the disease was in a severe form, in four a milder type prevailed.

Inulin, a polysaccharide of levulose, had already been recommended by Külz for the treatment of diabetes. Naunyn later expressed a rather unfavourable opinion regarding it. He had, however, only used the pure substance in seven cases, and even in these the observations were only carried out for a couple of days in some of them. Socin, indeed, found a relatively small excretion of sugar after giving artichoke flour, and acknowledged its superiority to dextrose. It had also been found that neither the oral secretion nor pancreatic juice had the power of exciting decomposition in inulin.

The plan of procedure he had adopted during the last half-year was the following:—An attempt was first made by strict diet to bring about a state of aglycosuria, and if this failed the sugar was reduced to the lowest degree possible the case admitted of. Then, to the diet made use of hitherto, and which generally consisted of vegetables, eggs, fat, coffee, tea, and bouillon (only in a few cases a little meat was allowed). Whilst this diet was kept up, for certain periods—mostly for from six to eight days—a daily addition of 100 gm. of inulin was made. The adminstration was generally along with vegetables, prepared with salt and butter, and occasionally as an addition a fruit dish free from sugar. Notice was constantly made of the using up of the inulin; the fæces, in regard to the carbohydrate contents, and in some cases the contents of the stomach, were also examined.

The first case was that of a student, æt. 22. He was under observation from August 15th to October

10th. During that period both sugar and acetone diminished; the patient felt quite well, with a total gain in weight of 16 lbs.

The second was that of a married woman, æt. 39. The disease began from four to five months ago. Admitted November, 1911, discharged December 30th same year. In this case there was no appreciable improvement, but the treatment was interrupted, as the patient had to leave the hospital on account of domestic affairs. But the speaker was of opinion that the diet had a distinct influence on the excretion both of sugar and acetone.

Case 3, female, æt. 45. Admitted January 9th of the present year. The illness began, or rather sugar was first found in the urine, three years ago. Under treatment till March 5th. The case was one of medium severity. With a strict diet the urine could be made free from sugar. During the inulin period sugar was present, but only in small quantity. On every occasion on which oatmeal was given the quantity of sugar increased.

Case 4, male, æt. 48. Under strict diet the urine could be brought to be quite free from sugar. The case was complicated by tuberculosis. After giving inulin four days there was still no sugar and the acetone disappeared. A review of these four cases showed that 100 gm. inulin was not only well borne, but that it led to a diminished excretion of sugar, as compared with the period when no carbohydrates were given, and also a favourable influence on the acidosis was observable. Moreover, the patients mostly gained in weight. In one case the treatment was begun when the patient was in too advanced a stage of the disease for any improvement to be expected.

In the six milder cases tolerance of the 100 gm. of inulin was always seen. Any acidosis present almost always disappeared. Here also there was no diminution in the comfort with which the treatment was borne.

HUNGARY.

Budapest, June 29th, 1912.

At the last meeting of the Budapest Royal Society of Physicians and Surgeons Dr. Alapi read a paper on

Calculi in the Kidneys of Infants.

During the last two years the reader has made 160 necropsies, and has observed at least 70 cases of renal calculi in one form or another in nurselings. Amongst these there was not one case of biliary calculus. Renal lithiasis may occur in the form of uratic dust which may be observed as yellowish striæ in the pyramids. Gravelly concretions and calculi are also found, and in some cases may be observed during life in the urine especially in extreme cases of inanition and malnutrition. A condition known as inanition fever has been described by American practitioners, and is found in newly-born children who do not receive a sufficient supply of milk or fluid nourishment. This fever is to be attributed to the deposition of uratic material in the kidney, though no evidence may be found in the urine. Bókay Tános points out that normally during the first few days of life, the urine is extremely rich in uric acid, and that by the end of the second week its more usual characters are assumed. The reader has more particularly observed 23 cases, of which 14 were boys and 9 were girls. The majority of the cases occurred under the age of six months, and all were due to bad feeding, inanition, and "misère physiologique." Of the total number 20 were reared by hand. In addition to the uratic dust observed in the pyramids, gravel and hard calculi, angular or rounded in form, were found in the pelvis of the kidney and calices. They consisted of urate of sodium, and it is possible that troubles arising at a later period of existence may have their ultimate origin in such early formed calculi. In some instances pyelitis or hydronephrosis was observed. The symptoms were obscure as the regular signs of renal colic were absent. Crying, general uneasiness, screaming during micturition or retention of urine may all be symptoms. The prognosis should be reserved. Fatal results may follow, in case of survival renal colic, or vesical cystitis may occur.

Prophylactic treatment.—Should be observed in insisting on ample and proper nourishment at the earliest period of life, although overloading of the stomach should be avoided. Weaning should not take place too soon, and during febrile attacks plenty of water should be given to facilitate the excretory action of the kidneys. If the stomach be extremely intolerant of food, etc., lavage of that organ or injections of artificial serum may be employed. If the lithiasis be confirmed the child when older may undergo a "cure" at the corresponding baths.

On the Occurrence of Koplik's Spots in Measles.

Dr. Bauer looked for spots on the buccal mucous membrane, first described by Koplik as preceding by some days the general eruption of measles and found them in 27 cases. In one case they preceded the eruption by six hours, in 11 cases by one day, in 5 by two days, in 3 by 1¼ days, and in 2 by four days. The spots were generally situated on the mucous membrane of the cheeks opposite the molar teeth, but occasionally on the lips—beginning as slightly raised, bluish-white, circular, sharply-defined points, in size less than a pin's head, and surrounded by a narrow red areola. In a few days they generally increase slightly and become more prominent, and the areola enlarges and becomes more irregular in outline. Their number varied between 6 and 20, and the time during which they persisted from two to six days. They were not marked just before, or at the time of the general eruption. They were not present in 14 cases (7.1 per cent.). Since they are never seen in other conditions accompanied by fever, they are of the greatest importance for the early diagnosis of measles. Bauer claims that the buccal eruption in measles was first mentioned by Gerhards, and that their importance was recognised by Filatow in 1895, a year before their independent discovery by Koplik. In Hungary the first consideration to this symptom was given by Prof. T. Bokay, who exhibited several cases with marked Koplik's spots in 1896, in the Medical Society.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Medical Inspection of School Children.—Dr. Meikle has issued his report of the work done during the school year 1910-11. There are now 62 schools under inspection in Edinburgh, with an average roll of 46,639 scholars. Inspection takes place on admission to school, at nine years, and on leaving school. In all, 23,641 children were examined. Duncan Street special school was opened in September, 1910, and there is thus now accommodation for 160 pupils in the special classes under the Board. During the year 3,605 notices were issued to parents in connection with 13,349 pupils examined; 25 per cent. related to lack of cleanliness, 40 per cent. to skin and dental disease, and 19 per cent. to defective vision or eye disease. Insufficient food, clothes, and cleanliness—evidences of neglect—are dealt with thus:—(1) Child neglect; (2) child relief. Under the first head neglect is classified under seven types—insufficient food, insufficient clothes, insufficient boots, neglect of medical treatment, vermin of head, vermin of body and dirt. In these cases warning cards are issued to the parents; failing these being effective the parents are summoned to the Board; eventually cases are referred to the Procurator Fiscal for prosecution. The warning cards do much to check neglect, and only 21 parents were summoned to the Board, and one convicted at the Sheriff Court. Child Relief.—If the Board decides that a case is one of poverty, the children are fed by the Board; since January, 1911, about 133,885 meals have been supplied at a cost of 2d. per meal. The food is distributed from the Board's cookery centre to the various dining centres. The maximum number on the feeding list was 1,599, and there were also 380 children who paid, and 280 who were paid for by the Parish Council. Applications for clothes and boots are forwarded, after inquiry, to the Police-aided Clothing scheme. The medical inspection of school children has, it is stated, greatly increased the work of the special departments of hospitals and of the dispensaries. Ringworm is no less prevalent than in previous years. At a given date 300 were absent from school owing to this cause. Among the difficulties in dealing with ringworm is that of securing a proper certificate that the child is fit to return to school, and to meet this it has been decided that the duty of giving this certificate is to devolve on the School Medical Officer. At the special school in Laureston for ringworm cases there are facilities for microscopic examination of the hair. Though only the more serious cases of defective vision are notified, about 10 per cent. of school children come under this head. These cases are treated at the infirmaries and dispensaries, and greatly increase the work there; the information obtained, also, is not available for the School Medical Officers. For these reasons the whole question of defective vision requires consideration in connection with the Government grant for treatment in connection with the medical inspection of children. There is in Edinburgh no adequate means of dealing with dental defect, and the Board are advised to take this into consideration also in connection with the grant. Among other matters referred to in the report are the Wednesday afternoon inspection of children who are absent from school, and who are not being medically attended elsewhere. There were 1,382 such, more than half being skin diseases. There are also the usual statistical tables, with relevant notes. It is of interest that out of 467 cases in which lung disease was present, pulmonary tuberculosis was detected in only eight cases. About 2.5 per cent. of the children had no vaccination marks.

Portrait of Dr. R. W. Philip.—The twenty-fifth anniversary of the opening of the Royal Victoria Dispensary for Tuberculosis is being fittingly celebrated by the presentation to Dr. Philip of his portrait. Dr. Philip's pioneer work in connection with tuberculosis is too well known to demand recapitulation here; it is enough to say that what is generally known as the "Edinburgh system," which has recently received the *imprimatur* of the Departmental Committee by being substantially followed on their recommendation, owes its existence to the administrative ability of Dr. Philip. Dr. Philip's portrait will be placed in the hall of the dispensary. The Honorary Treasurer to the Fund is Mr. C. E. W. Macpherson, 6 N. St. David Street, Edinburgh.

National Insurance Act.—The Scottish National Insurance Commissioners have appointed Dr. Currie, Medical Officer of Health for Stirlingshire, and Dr. Matheson Cullen, Edinburgh, to the posts of Principal and Assistant Medical Officers at salaries of £800 and £500 a year respectively. We regret that through inadvertence it was stated in this column last week that Dr. McLeary had received one of these appointments. He holds office, not under the Scottish, but under the English Insurance Commissioners. Dr. Cullen has for several years been a member of the Edinburgh Town Council, a magistrate of the city, and convener of the Public Health Committee. His appointment necessitates his vacating his position on the Town Council, and steps are being taken by the Executive Ward Liberal Committee to select a candidate as his successor. The annual meeting of the Edinburgh Branch of the British Medical Association was held in Edinburgh on June 28th. There were upwards of a hundred members present, representing Edinburgh, Leith, the Lothians, Roxburgh, Berwick, Peebles and Selkirk. It was unanimously resolved: (1) "That the meeting express its extreme disapprobation of the action of Dr. Matheson Cullen in accepting one of the paid Medical Officerships for Scotland under the National Insurance Act." (2) "That the meeting expresses its strong disapproval of the action of Sir James Russell in agreeing to act on the Provisional Local Insurance Committee as medical representative of the Town Council." The acceptance of both these appointments is in direct antagonism to the declared and deliberate policy of the British Medical Association and of the Scottish Medical Insurance Council. The meeting further unanimously resolved to express its strong disapproval of Dr. Norman Walker's refusal to place his resignation as a member of the Scottish Advisory Committee in the hands of the Scottish Medical Insurance Council, to be used if and when found to be wise and expedient, and to call on him to explain to the profession the reason for such decision on his part. It should be stated in explanation of this resolution that Dr. Norman Walker is the Direct Representative of Scottish medical practitioners on the General Medical Council. The practitioners in this area, being a section of his constituents, are of opinion that his action is not only diametrically opposed to the wishes, but is also harmful to the ideals of the profession and to the interests of the public. Further, of the eleven medical members of the Scottish Advisory Committee, Dr. Walker is the only one who has refused to give an undertaking that he will resign his position on the Advisory Committee if called upon to do so by the Scottish Medical Insurance Council.

Typhus Fever in Glasgow.—During the past week or two there has been a slight outbreak of typhus fever in Glasgow. The infected area is on the south side of the city, and there have been between twenty and thirty cases notified. This recrudescence of the disease serves to remind one that in the annals of Glasgow, as of Edinburgh, typhus fever has played a prominent part among contagious maladies. It became virulent in the city at the time of the first Irish immigration, and in the great epidemic of 1847 accounted for over 4,000 deaths. The last great epidemics were in 1864, 1865 and 1868, the deaths being 1,138, 1,177 and 970 respectively. The quarter of the city affected in the present instance harbours large numbers of alien immigrants.

BELFAST.

Benn Ulster Eye, Ear, and Throat Hospital.—The annual meeting of this Institution was held on June 25th, the High Sheriff of Belfast, Mr. James Johnston, in the chair. During the year 2,348 new patients, in addition to 455 from the previous year, attended the out-patient department, the total attendances having been 7,535. Three hundred and sixty patients were admitted into the wards from the following counties:—Antrim (including Belfast) 196; Londonderry, 24; Monaghan, 18; Fermanagh, 4; Donegal, 4; Tyrone, 36; Down, 40; Armagh, 38. The work done during the past year was of the usual kind. There were 35 operations performed for cataract, in addition to 15 for cataract produced by injury to the eye. Anæsthetics were administered for 220 operations of various kinds for the relief of eye, ear and throat troubles. A very large number of patients were tested and fitted with spectacles, a most important part of the work of an eye hospital. The Spectacle Mission has co-operated with the medical staff in assisting poor persons to obtain glasses free of charge. A large amount of work has been done in the nose and throat department, especially for the relief of obstruction to free nasal breathing, and for the cure of deafness caused by post-nasal obstruction. The Committee regret that they have lost the services of Miss Middleton, their Lady Superintendent, who has managed the hospital so successfully for over 20 years. Miss Middleton was the recipient of a small presentation from members of the Committee and the medical staff.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE MEDICAL DEFENCE UNION.

To the Editor of The Medical Press and Circular.

Sir,—I am the debtor of your correspondent Dr. S. J. Ross, of Bedford, for his information and suggestions. In response to his query, I have no intention of resigning my membership of the Medical Defence

Union, the fact of my letters to the Gen. Sec., Dr. A. G. Bateman (*vide* The Medical Press and Circular, June 8th, 1910, and May 29th and June 12th, 1912) being allowed to pass unchallenged, indicating a call for reform, from which I do not wish to be disfranchised.

I may here remind the Council that on November 7th and December 6th and 19th, 1906, I submitted to them a series of questions, a copy of which I beg to enclose, but failed to get any answer or satisfaction from them, and on April 8th, 1907, I gave the Council notice of motion and of questions to be put at the annual meeting, and have done so yearly till now.

Such notices, however, having always been ruled "out of order" on the alleged disabilities of the meeting, which the Council has elected to call under Article 28 of the Memorandum of the Association.

For the first time during my 26 years of membership the notice convening the annual meeting (the 20th inst.) and the agenda have been marked "Statutory," the motive obviously being to limit the scope of the meeting to mere formal business and thus to put out of court the discussion of debatable items, my notice of motion (*vide* The Medical Press and Circular, June 12th, 1912) being ignored as usual. Early in the meeting in question I endeavoured to raise some points of order, only to be parried, and after listening for half an hour to a presidential address which, however interesting, was not strictly relevant to the Union's work, I ventured with every deference to ask the President how long he proposed favouring us? My question, however, was not received kindly, and the address concluded some ten minutes later. I trust it will be printed and circulated, as strangers were asked to withdraw and there was not, I believe, any recognised shorthand reporter present.

Those who were at Brighton last year may remember that I similarly raised points of order and asked questions at the opening of the meeting, but that the then president peremptorily declined to deal with them and proceeded to the next business. He talked out time with a long and instructive presidential address, and hurried through the rest of the business to enable him, as he ingenuously explained, to catch his train. It was to avoid the possibility of such undue haste or the adjournment of the meeting that I intervened and not out of the remotest discourtesy to the President. Indeed, I did myself the honour of moving a vote of thanks to him at the conclusion of the meeting.

The members may share my view that the duty of the Council—on this hitherto the only chance the ordinary member has of being present and taking part —is to give an account of their stewardship and further it would be an act of grace if they abstained on matters in which they are personally involved from any active part or partisan spirit, voting and the like.

The voice of an annual meeting should be that of the *general body of members* and it should be suitably convened and so conducted. Even exclamations by the Council of assent and dissent are better avoided.

As my motion according to the Council's decision can only be considered at a meeting convened under Article 17 of the Memorandum—upon a requisition in writing signed by 20 members, I shall be grateful to any member who will fill in the form and post it to me.

Such meeting need not of necessity be held now, but the requisition can be held in readiness for this time next year. If the Council elects to hold also a so-called "Statutory" meeting, the latter can be taken on the same occasion.

I am, Sir, yours truly,
Dennis Vinrace.

88a, Gower Street, London.
June 22nd, 1912.

The form of requisition will be found on page v. of Advertisements.

[The rules which govern incorporated bodies are definite and cannot be contravened if the society's actions are to remain valid. This observation applies to the Statutory Annual General Meeting, and it is to be presumed that the officials of the Union will act in exact accordance with rules. We think it fair, however, to insert our correspondent's letter.—Ed. M. P. and C.]

OBITUARY.

LIEUTENANT-COL. F. E. McFARLAND.

We regret to announce the death of Francis Edward McFarland, which took place on June 24th, at his residence, Chichester Park, Belfast. The deceased had been in failing health for some months, so that his death was not quite unexpected. He was the only son of the late Mr. Edward McFarland, and was born in Dublin. He received the diplomas of the Colleges of Physicians and Surgeons of Ireland as far back as the year 1858. Immediately after qualifying he determined to enter the Army Medical Department. In this service he remained for a period of 20 years, the greater part of which was spent in India. He performed his duties so as to merit the approval of all with whom he came in contact. Preferring private practice to military life, he come to Belfast at the completion of his term of service, and soon built up an extensive high-class practice. He was universally beloved by his patients and the public, and by his upright and honest dealing he soon won the esteem and respect of his brethren in the profession, who elected him to the high office of President of the Ulster Medical Society for the session 1894-5. He was also elected Consulting Physician to the Ulster Hospital for Women and Children, an Institution in which he took the liveliest interest during the remainder of his life. Of a modest and retiring character, he took no active part in the public life of his adopted city, but was ever to the front in the quiet performance of charitable work for the poor. He took a great interest in the cause of temperance, and his unostentatious efforts in this direction will not soon be forgotten. He was the type of a good, old-fashioned, genial and sympathetic general practitioner. Much sympathy will be felt with his widow and family.

DR. R. PARAMORE, OF LONDON.

A familiar figure in the West Central district of London has been removed by the sudden death of Dr. Richard Paramore, which took place last week at his residence in Gordon Square, Bloomsbury. The deceased, who qualified as L.S.A. in 1870, became M.R.C.S. in 1872, and took the M.D.Brux. in 1884, with honours in clinical medicine. Dr. Paramore held many local appointments, including those of Physician to the Homes of Hope and to the Somers Town Blind Aid Association. He was also District Medical Officer to the Post Office. He was the author of numerous works on health subjects and temperance, as well as a frequent contributor to the medical journals. He leaves two sons, both of them members of the medical profession, to mourn his loss.

DR. WILLIAM MURRELL, OF LONDON.

It is with the deepest regret that we have to record the death of Dr. William Murrell, Senior Physician to the Westminster Hospital, which took place on Friday last at his residence in Welbeck Street, W. The deceased, who studied at University College Hospital, qualified as L.S.A. in 1874, becoming M.R.C.S., L.R.C.P., in 1875. He took the M.D.Brux. in 1879, and was elected F.R.C.P.Lond. in 1883. Quite early in his professional career, Dr. Murrell made a name for himself in the direction of experimental therapeutics and pharmacology, and his work at the Brompton Hospital and elsewhere was speedily recognised by his early election to the staff of the Paddington Green Children's Hospital and subsequently to the Westminster Hospital, where he was Lecturer on Clinical Medicine and Materia Medica for many years. He was Examiner in Materia Medica to the Universities of Aberdeen, Edinburgh and Glasgow, as well as at the Royal College of Physicians of London. Dr. Murrell was an honorary Fellow of the Medico-Chirurgical College, Philadelphia, Lauréat de l'Académie Médecine, Paris, and a member of the Faculty of Medicine of the University of London, and he was also a major of the Royal Army Medical Corps.

Dr. Murrell was always a staunch friend and supporter of this Journal and his contributions thereto were written in that crisp and breezy style which characterised all his writings. Only a short while ago his well-known book "What to do in Cases of Poisoning," reached its eleventh edition. He was the editor of Fothergill's "Practitioner's Handbook of Treatment," which reached its fourth edition in 1907.

His loss will be keenly felt by the Westminster Hospital Medical School Staff, of which he was such a distinguished member, as well as by a wide circle of friends in the medical profession.

REVIEWS OF BOOKS.

SURGICAL TREATMENT OF LOCOMOTOR ATAXIA. (*a*)

The author's thesis is that in male subjects in every case of this disease, without exception, an abnormal condition of the urethra exists, and that by treatment directed to this condition many of the symptoms of the disease may be cured or alleviated. The urethra is, therefore, carefully examined in every case by means of a special instrument. The lesions usually found are erosions, granulations and strictures. In tabes we have to do with a nervous defect which leads to degeneration of the posterior columns of the cord. This defect is acquired through the agency of the syphilitic virus. The changes occurring in this disease are primarily due to irritation of peripheral nerves. The author in this monograph certainly makes out a good case for urethral irritation as a causal factor in producing the symptoms associated with locomotor ataxia. He gives a series of cases reported to the New York Academy of Medicine in 1908, and these are certainly very convincing. The records of cases treated by the author at the Charcot Clinic of the Salpêtrière Hospital, Paris, are also very striking. The chief operative procedure adopted was dilatation of the urethra in practically every case. It would certainly seem as if a ray of hope were at last shining in upon this terrible disease which, even under prolonged iodide treatment, is a very hopeless condition. The book deserves to be carefully studied. The views expressed in it are certainly novel, and are worthy of being put to the test by those who have cases of locomotor ataxia under their care.

BRONCHIAL ASTHMA. (*b*)

In this little book the author charges full tilt against the view that bronchial asthma depends upon spasm of the bronchial walls. He holds that the condition is due to an obstruction not merely of the smallest, but also of the larger and even the largest tubes by morbid products. These morbid products are the "spirals" which are produced in the small bronchi by degeneration of epithelium and exudation and are detached and pass into the larger tubes where along with others they tend to form an obstruction. Some degree of cardiac failure may lead to swelling of the bronchial walls and precipitate a paroxysm.

In spite of a powerful denunciation of the "spasm" theory, we are informed that a few whiffs of chloroform, etc., may be effective in a purely nervous asthma. We confess to some difficulty in understanding just what the author means in this instance; and through the book he seems to us to fail in driving home with sufficient clearness what lesson he means his illustrations to convey. We find no mention of eosinophilia in the blood, although its existence in the sputum is referred to.

Successful results in the treatment with anti-diphtheric serum of asthma due to a fibrinous exudation are recorded.

If the author, to our mind, has not proved his case he has, at least, done good service in calling attention to the importance of trying to find a definite cause for the dyspnœic attacks and in denouncing the indiscriminate abuse of powerful anti-spasmodics by asthmatics. We noted printer's errors on several pages.

ANATOMY AND PHYSIOLOGY OF THE NERVOUS SYSTEM. (*a*)

This book has been written for three classes of readers, for the non-medical student of psychology, for the student of medicine as an introduction to the study of the nervous system, and for the medical man who desires to refresh his memory in considering cases of neurological interest. In a series of ten chapters Dr. Lickley has contrived to set forth the fundamental facts pertaining to the anatomy and physiology of the nervous system; and he has been highly successful in his endeavours to appeal alike to the non-medical and to the medical student of the subject. We must confess his task has been no light one, and he therefore deserves all the greater credit for having accomplished it in such a meritorious fashion. We have studied similar works with greater pretensions without learning so much as we have from a perusal of the one before us. A special feature of Dr. Lickley's book is the wealth of illustrations, many of which are printed in colour, and they number no fewer than one hundred and eighteen. This is a text-book which we can recommend to our readers with more than ordinary confidence in its teaching.

MEDICAL NEWS IN BRIEF.

The Lord Mayor at St. Thomas's Hospital.

An anonymous gift of £20,000 was announced last week at annual prize distribution of St. Thomas's Hospital Medical School, at which the Lord Mayor and Lady Mayoress were present.

The Lady Mayoress distributed the prizes to the successful students, after which Sir Thos. Crosby, M.D., the Lord Mayor, having been welcomed by the Treasurer as an old student of the School, alluded to his former relationship with the College. Giving a word of advice to the staff and students, he said: "You are the educators of the future generation of doctors. They may not all of them stop inside this small island. They may go to the length and breadth of His Majesty's dominions. His Majesty's subjects in these far-off realms will be wholly and entirely dependent upon the skill that each individual young practitioner takes with him." Members of the profession, he added, should be more actively interested in municipal life, as by doing so they would teach many successful merchants a lesson in all those things which were useful for their fellow-citizens.

Epsom College.

The annual general meeting of the Governors of Epsom College was held last week, at 37, Soho Square, W., under the presidency of Sir Henry Morris, Bt., F.R.C.S., the Treasurer, who was supported by Sir W. S. Church, Sir Alfred Pearce Gould, Sir Shirley Murphy, Sir James Reid, and other governors. The Chairman said that the number of boys in the College was the highest on record, and there was a waiting list for entrance. Sir Henry Morris was elected a Vice-President of the College, in recognition of his many services to the College. and of his having so indefatigably urged upon the General Medical Council

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(*a*) "A Surgical Treatment of Locomotor Ataxia." By L. N. Denslow, M.D., Fellow New York Academy of Medicine; late Physician, Diseases of the Skin, Bellevue Hospital, New York; late Professor, Genito-Urinary Surgery and Venereal Diseases, St. Paul Medical College. Crown 8vo., pp. x. and 118. London: Bailliere, Tindal and Cox, 1912. 3s. 6d. net.

(*b*) "Bronchial Asthma: Its Pathology and Treatment." By J. B. Berkart, M.D., late Physician to the City of London Hospital for Diseases of the Chest, etc. Revised and abridged third edition. Pp. vi. and 150. Oxford University Press, Henry Frowde. 1911.

(*a*) "The Nervous System." An Elementary Handbook of the Anatomy and Physiology of the Nervous System for the use of Students of Physiology and Neurology. By James Dunlop Lickley, Demonstrator of Anatomy, University of Durham College of Medicine, etc. London: Longmans, Green and Co., 1912. Price 6s. net.

the expediency and the justice of permitting adequately equipped public schools to be approved as institutions in which the preliminary sciences might be studied.

Royal Society of Medicine.

The following have been elected as officers of the Royal Society of Medicine for the Session 1912-13, to enter into office on October 1st next:—

President: Sir Francis H. Champneys, Bart., M.D.

Honorary Treasurers: Sir William Selby Church, Bart., K.C.B., M.D., and Sir Henry Morris, Bart., F.R.C.S.

Honorary Librarians: Sir Rickman J. Godlee, Bart., M.S., and Dr. Norman Moore, M.D.

Honorary Secretaries: Mr. Herbert S. Pendlebury, F.R.C.S., and Dr. E. Farquhar Buzzard, M.D.

The City Corporation and Florence Nightingale.

The members of the City Lands Committee of the City Corporation have inspected and approved the marble statuette of Miss Florence Nightingale which it has been arranged shall be placed in the Guildhall, in the lobby, near the entrance to the Council Chamber. The statuette is the work of Mr. Walter Merrett.

Medical Sickness and Accident Society.

At the usual monthly meeting of the Executive Committee of this Society, Dr. F. J. Allan in the chair, the accounts presented showed the business of the Society to be steadily growing, a considerable addition to the funds having been made since the beginning of the year.

A cordial vote of thanks was unanimously passed to Dr. F. de Havilland Hall, F.R.C.P., the retiring Chairman, now President, for the valuable services he has rendered to the Society during the many years he has been connected with it, and in recognition of Dr. Hall's work it was agreed to present a substantial sum to Epsom College as a permanent record of his services. The Society now has a large number of votes in Epsom College, and these are given only to members of the Medical Sickness Society or their relatives.

Royal Medical Benevolent Fund Society of Ireland.

A regular meeting of the Central Committee was held on Wednesday last. The Secretary reported the death of Sir Thornley Stoker, Bart., member of the Central Committee. The following resolution was unanimously adopted:—Resolved: "That at this the first meeting of the Executive Committee of the R.M.B.F.S., of Ireland, since the lamented death of Sir Thornley Stoker, Bart., ex-President R.C.S.I., the Committee desire to record their sense of the great loss the Society and the Committee have sustained in the removal from their counsels of a colleague, who through a long series of years placed at the disposal of the fund his many gifts of heart and mind, and on whose sound judgment and advice the members of the Committee could always rely. The Committee further desire to convey to Sir Thornley Stoker's sister, Lady Thomson, and to the other members of his family, an expression of profound sympathy with them in their bereavement."

Three urgent applications, which were late for the annual distribution, were considered, and grants amounting to £26 were awarded.

The Poor-law Medica Officers' Association

The annual meeting of the Poor Law Medical Officers' Association of England and Wales was held on the 25th ult., at the Council House, Bristol, under the presidency of Surgeon-General G. J. H. Evatt, C.B. The accounts showed a balance in hand of £88 14s., although the expenditure during the year had exceeded the ordinary income. The year had been an exceptionally trying one, owing to the activities demanded to meet the emergency in connection with the National Insurance Act, which was regarded as a serious menace to the profession.

Papers were read by Mr. J. J. Simpson on "Poor Law Medical Work as Affected by the National Insurance Act," and by Dr. C. F. S. Flemming, of Bradford-on-Avon, on "Difficulties in the Practice of the Poor Law Medical Officer." Dr. C. W. H Parkinson opened a discussion on "The Necessity of Union among all Medical Officers holding Part-time Appointments." The annual banquet was held the same evening at the Royal Hotel.

A Munificent Gift for the Welsh Medical School.

As a mark of appreciation of the visit of Their Majesties to the King Edward VII. Hospital, Cardiff, last week, an anonymous donor has forwarded a gift of 10,000 guineas for the building of the new pathological wing of the institution which is to be erected for the Welsh Medical School, the joint establishment of the Hospital and University College of South Wales and Monmouthshire. It is estimated that £50,000 will be required to complete the medical school buildings.

Will of Sir Thornley Stoker.

The late Sir William Thornley Stoker, the Dublin surgeon, of 21 Hatch Street, and formerly of 8 Ely Place, Dublin, who died on the 1st ult., left personal estate amounting to £10,315 15s., as valued for the purposes of estate duty.

PASS LISTS.

University of London.

The following candidates have passed the third (M.B., B.S.) examination for medical degrees:—

Honours list: Evan P. Evans (*a*), Maud F. Forrester-Brown (*b*, *c*), Thomas C. Graves, B.Sc. (Vet. Sci.) (*c*), Philip H. Mitchiner (*a*, University medal), Donovan B Pascall (*a*), Harold Rowntree (*a*), Catherine V. Turner (*a*).

Pass list: John W. Adams, Melville M. Adams, Frederick J. Anderson, Winifred Austin, Grantley Barratt, Bertie Blackwood, Joseph H. Campain, Gilbert C. Chubb, D.Sc., William C. Dale, John L. Davies, Arthur F. W. Denning, Josiah R. B. Dobson, Macormack C. F. Easmon, Archibald Ferguson, Norman F. Graham, Arthur S. Hahn, Alexander K. Hamilton, Reginald S. Harvey, Frederic J. Humphrys, Edward L. Hunt, Charles E. S. Jackson, William H. Kauntze, Henry G. Kilner, William B. Laird, Andrew B. Lindsay, Martin W. Littlewood, Jivraj N. Mehta, Ernest S. Miller, Harold A. Moody, Richard N. O. Moynan, Alfred A. E. Newth, Edgar L. R. Norton, Bernard R. Parmiter, Richard D. Passey, Edward H. Roberts, Kenneth Robinson, Samuel P. Rowlands, Edward A. Seymour, Bernard S. Simmonds, Arthur H. Thomas, Thomas A. F. Tyrrell, and Francis S. Williams.

(*a*) Distinguished in Medicine; (*b*) Distinguished in Pathology; (*c*) Distinguished in Forensic Medicine.

University of Sheffield.

The following examination results have been published (July 1st):—

M.B., Ch. B., Final Examination (Part B. completing Examination).—John P. Mathews (with distinction in obstetrics and in medicine, and clinical gold medal). (Part A.)—John Davidson, H. S. Dufty, J. E. Stacey (with distinction in public health and in pathology), L. E. Sutcliffe.

Diploma in Public Health.—Marion H. Archibald, and Cyril Banks.

University of Durham.

At the Convocation, held on June 25th, 1912, the following degrees were conferred:—

Doctor of Medicine.—Helen G. Clark, M.B., B.S., B.Hy., D.P.H.Durh., Sebert F. St. Davids Green, M.B.Durh., Duncan M. Johnston, M.B.Durh., Chas. G. Kemp, M.B., B.S.Durh., Charles F. M. Saint, M.B., B.S.Durh.

Doctor of Medicine for Practitioners of Fifteen Years' Standing.—William J. M. Barry, M.D. Brux., M.R.C.P., E., L.R.C.P. and S., L.F.P.S., G., Lilian V. Cooper, L.R.C.P. and S., L.F.P.S., G., Charles Corben, M.R.C.S., L.R.C.P., Arthur E. Dodson, M.R.C.S., L.R.C.P., L.S.A., Edward G. Gibbs-Smith L.R.C.P., I., L.S.A., D.P.H., Herbert

E. Goulden, M.R.C.S., L.R.C.P., D.P.H., Charles G. Higginson, M.A., M.R.C.S., L.R.C.P., L.M.S.S.A., Richard H. King, M.R.C.S., L.R.C.P., James C. McWalter, M.A., L.M., L.A.H., F.R.C.P. and S., G., D.P.H., Robert Odell, M.R.C.S., L.R.C.P., F.R.C.S., E., Edward A. B. Poole, M.R.C.S., L.R.C.P., L.S.A., and John R. Russell, M.R.C.S., L.R.C.P.

Master of Surgery (M.S.).—Charles F. M. Saint, M.B., B.S.Durh.

Bachelor of Medicine (M.B.).—John B. Alderson, Evelyn A. Constable, Norman Hodgson, Harold L. James, James Kerr, Francis J. Lidderdale, Lionel G. Pearson, Fred Phillips, B.A., Thomas C. Storey, Carl J. V. Swahnberg, and Samuel K. Young.

Bachelor of Surgery (B.S.).—Oscar F. D. Airth, M.B., Ronald G. Badenoch, M.B., Evelyn A. Constable, Reginald C. H. Francis, M.B., M.R.C.S., L.R.C.P., Norman Hodgson, Harold L. James, James Kerr, Francis J. Lidderdale, Fred Phillips, B.A., Thomas C. Storey, and Samuel K. Young.

Diploma in Public Health (D.P.H.).—Geo. B. Harland, M.B., B.S.Lond., William Mackenzie, M.D.Edin.

The following candidates have passed the second examination for the Degree of Bachelor of Medicine.—

Anatomy and Physiology (second class).—Henry Evers, with honours.

Ordinary Pass List.—John F. C. Braine, Cyril C. H. Cuff, Horace G. B. Dove, Ethne Haigh, Reginald A. Hooper, Ah Chit Jap, M.R.C.S., L.R.C.P., Edward Ek Dun Lau, John E. Measham, Claude W. Morris, John D. Proud, Douglas O. Richards, Hugh G. Sparrow, Edgar J. Tyrrell, and Harold Williamson.

Dublin University.

The following honorary degrees are to be conferred on Saturay next, in connection with the Bicentenary Celebrations:—

LL.D.—Sir Thomas Boor Crosby, Lord Mayor of London; Right Hon. Lorcan G. Sherlock, Lord Mayor of Dublin; Sir J. Hawtrey Benson, President, Royal College of Physicians of Ireland; Richard Dancer Purefoy, President of the Royal College of Surgeons in Ireland; William Peterson, Principal and Vice-Chancellor, M'Gill University, Montreal.

M.D.—Sir Thomas Barlow, Bart., President, Royal College of Physicians, London; Sir John Halliday Croom, Professor of Midwifery, University of Edinburgh; Sir Richman J. Godlee, Bart., President of the Royal College of Surgeon of England; Sir Christopher Nixon, Bart., Vice-Chancellor, National University of Ireland.

D.Sc.—Prof. J. G. Adami, Professor of Pathology and Bacteriology, M'Gill University, Montreal; Prof. Raphael Blanchard, Professor of Natural History and Parasitology, University of Paris; Prof. Frederick O. Bower, Professor of Botany, University of Glasgow; Prof. Percy F. Frankland, Professor of Chemistry, University of Birmingham; Prof. Ernst Fuchs, Professor of Ophthalmology, University of Vienna; Prof. Karl Ritter von Goebel, Professor of Botany, University of Munich; Prof. A. P. Goubaroff, Professor of Gynæcology, University of Moscow; Prof. Allvar Gullstrand, Professor of Ophthalmology, University of Upsala; Prof. Henr Hartmann, Professor of Operative Surgery, University of Paris; Prof. John N. Langley, Fellow of Trinity College, and Professor of Physiology, University of Cambridge; Sir William Macewan, Regius Professor of Surgery, Glasgow; Prof. Franklin P. Mall, Professor of Anatomy, Johns Hopkins University, Baltimore; Charles J. Martin, Director Lister Institute of Preventive Medicine; Prof. Alexander Maximow, Professor of Histology and Embryology, Imperial Military Academy of Medicine, St. Petersburg; Prof. Hans H. Meyer, Professor of Pharmacology, University of Vienna; Count Carl A. H. Morner, Vice-President, Royal Swedish Academy of Sciences, Stockholm, and Rector of the Caroline Medico-Chirurgical Institute, Stockholm; Prof. Robert Muir, Professor of Pathology, University of Glasgow; Sir William Osler, Bart., Regius Professor of Medicine, Oxford; Prof. Ivan P. Pavlov, Director of the Physiological Department, Imperial Institute for Experimental Medicine, and Emeritus Professor of Physiology, Imperial Academy of Medicine, St. Petersburg; Professor Herman Sahli, Professor of Therapeutics, University of Berne; Prof. Ernest H. Starling, Professor of Physiology, University College, London; Prof. Edgar Fahs Smith, Provost of the University of Pennsylvania; Prof. George D. Thane, Professor of Anatomy, University College, London; Prof. Robert Tigerstedt, Professor of Physiology, University of Helsingfors; Prof. J. Whitridge-Williams, Professor of Obstetrics, Johns Hopkins University, Baltimore.

The following candidates have passed the preliminary scientific examination, Medical School:—

Physics and Chemistry.—Alfred L. Wilson, Eugene McSwiney, Patrick Rocks, William E. Collins, William Dowling, Eric Beatty, Charles Young, Fredk. Murphy, Thomas Sweetnam, Eileen Glenn, Robert A. C. Barrett, Thomas S. Black, Sydney V. Furlong, Roland H. Graham, Thomas Stanton, Carl O'Connor, John A. C. Kidd, and Francois Joubert.

Botany and Zoology.—The following candidates have passed on high marks:—Norman Bor, Thomas P. Chapman, Charles H. Comerford, and Patrick Rocks.

The following candidates have passed the examination:—Patrick Molony, Robert C. Ramsay, Alan Grimbly, Eugene McSwiney, Harold McNeile-Dixon, William Fearon, Andries Albertyn, Mortimer McGee-Russell, Francois Joubert, Frederick Murphy, Paul Smith, Robert Stoney, William R. Burns, Thomas J. Lane, James Leahy, David Prentice, Benjamin Merrin, Charles O. Young, Millicent Hamilton-Johnstone, William J. Hamilton, Francis Battersby, Joseph Bird, Edward Lipman, Cyril Littledale, Eileen Smith, Walter Bullen, and Alan Wright.

Intermediate Dental Examination.—The following candidates have passed:—Louis E. Wigoder and Herbert Wright.

The following degrees were conferred last Saturday:—

Honoris Causa.—Doctor in Medicina.—Guilelmus Launcelottus Gubbins (Eques de Ordine Balnei).

Baccalaureus in Scientia Dentaria.—Georgius Andreas Yeates.

Baccalaurei in Medicina, in Chirurgia, et in Arte Obstetricia.—Oswaldus Vincentius Burrows, Arturus Chance, Johannes Colgan, Franciscus Stanislaus Crean, Hieronymus Henricus Counihan, Robertus Alexander Flood, Jacobus Herbertus Grove-White, Henricus Percy Harpur, Johannes Timotheus Donal Higgins, Reginaldus Johnson, Robertus Henricus Cummins Lyons, Dorothy Kate Milne, Antonie Chiappini Redelinghuys, Ricardus Eduardus Tottenham, and Georgius Hugh Trayer.

Doctors in Medicina.—Guilelmus Boxwell, Arturus Chance, Franciscus Stanislaus Crean, Frank Crosbie, Townley Garratt Hardman, Georgius Fredricus Columb Healey, Carlisle Kelly, Matthaeus M'Knight, Mauricius Sydney Moore, Robertus Walpole Murphy, Henricus Jocelyn Smyly, Bethel Solomons.

Trinity College, Dublin.

The following candidates have passed the intermediate medical examination, Part II., Trinity Term, 1912:—Joseph A. Quinn, Philip W. McKeag, Robert J. B. Madden, Frederick C. Fleming, Thomas W. G. Johnson, Walter J. Ronan, Robert L. Vance, William O. Tobias, Richard W. Acheson, William L. Bates, Francis A. L'Estrange, and Edwin Boyers.

Conjoint Examinations in Ireland.

The following candidates have passed the Preliminary examination of the Royal College of Physicians and the Royal College of Surgeons, June, 1912:—F. J. Bowers, T. J. Clune, J. Cusack, J. L. Farnon, J. Geraghty, F. G. Hall, V. Hawkins, P. Hegarty, J. F. Holmes, L. B. Leonard, M. O'Donnell, M. P. O'Meara, W. Robinson, A. Y. Sloane, R. J. Tate, and H. C. Williamson.

Third professional examination, June, 1912.—R. J. Brookes (with honours), R. A. Austin, H. A. S. Deane, G. S. Douglas, J. Lanigan, F. B. McTavish, J. J. O'Connell, H. O'Donoghue, J. J. Reynolds, M. Shipsey and F. M. Taylor.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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L. S. A. (Herts.).—"Urogenin" is a double salt of theobromin and hippurate of lithium, used as a diuretic, having an action similar to digitalis. "Letargin" is a local anæsthetic composed of Ext. Hamamelis, Novocain, Sod. Chlorat., and Thymol, together with one drop of a one per 1,000 solution of Suprarenin Hydrochloride.

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A. S. G. (Aix-les-Bains).—Yes, to Prof. Bettmann, at Heidelberg.

CANCER.

SUGGESTED on reading leading article in MEDICAL PRESS, June 19th. (The diagnosis of Cancer was said to depend on the recognition of "Giant Cells" in the blood or tissues by the microscope.)

"The very many treatments tried,
Have one by one been cast aside,
Regretfully we now must tell,
All (so-called) cures (?) a giant 'cell.'"

A. D.

DR. P. C. E. (Hants).—The so-called "phossy jaw" is now happily, a thing of the past owing to the prohibition of the use of white phosphorus for making matches. It is universally conceded that phosphorus sesquisulphide is free from the risks accompanying the employment of the ordinary phosphorus.

M.B.EDIN. (Somerset).—We are informed upon high authority that you would be well advised to sign the complementary pledge, the last clause of which might be slightly modified to meet the conditions of the neighbourhood and the class of patient usually seen at the institution in question.

M.R.C.S. (Southend).—There is no ethical reason whatever against a medical man identifying himself with municipal life. On the contrary, the presence of a medical member of a borough council may be of the greatest use in assisting his lay colleagues towards correct decisions in all matters respecting the sanitation and health of the district.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, JULY 3RD.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H Duncan). 5.30 p.m.: Eye Operations (Mr. Brooks).

THURSDAY, JULY 4TH.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics:—Medical Out-patient (Dr. A. J. Whiting): Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

ROYAL SOCIETY OF MEDICINE (OBSTETRICAL AND GYNÆCOLOGICAL SECTION) (1, Wimpole Street, W.).—8 p.m.: Short Communications by Dr. Blair Bell and Dr. Tenison Collins. 9 p.m.: The President (Dr. Amand Routh) will give a Review of the Work of the Session. Votes of thanks to the retiring Officers and Members of Council.

Appointments.

BANTING, C., M.D., B.S.Lond., F.R.C.S.Eng., Clinical Assistant in the Ear and Throat Department at University College Hospital.

BALDWIN, ASLETT, F.R.C.S.Eng., Surgeon to St. Mark's Hospital.

BRIERCLIFFE, R., M.B., Ch.B.Vict., Assistant Director of the Clinical Laboratory at the Manchester Royal Infirmary.

COURTS, A. C. S., M.B., B.S.Lond., House Surgeon at University College Hospital.

DARWALL SMITH, G. F., M.B., B.Ch.Oxon., F.R.C.S.Eng., Assistant Obstetric Physician to St. George's Hospital.

FENWICK, STEPHEN, F.R.C.S.Eng., Assistant Surgeon to the Out-patient Department at Charing Cross Hospital.

GOW, JOHN, M.B., Ch.B.Vict., Accident Room House Surgeon at the Manchester Royal Infirmary.

HENDERSON, A. A., M.R.C.S., L.R.C.P.Lond., Obstetric Assistant at University College Hospital

LEECH, E. B., M.D.Cantab., M.R.C.P.Lond., Assistant Medical Officer at the Manchester Royal Infirmary.

LOCKYER, CUTHBERT, M.D., B.S.Lond., M.R.C.P.Lond., F.R.C.S.Eng., Assistant Obstetric Physician to Charing Cross Hospital.

MELLAND, C. H., M.D.Cantab., M.R.C.P.Lond., Assistant Medical Officer at the Manchester Royal Infirmary.

SELLERS, WILLIAM, M.D.Lond., D.P.H., Professor of Forensic Medicine in the University of Manchester.

SHAW, CECIL E., M.D., M.S.R.U.I., Lecturer in Ophthalmology and Otology in the Queen's University of Belfast.

SYMMERS, W. ST. C., M.B., M.S.Aberd., Lecturer in Medical Jurisprudence at the Queen's University of Belfast.

Vacancies.

The Hospital for Sick Children, Great Ormond Street, London, W.C.—House Physician. Salary (for six months) £30, washing allowance £2 10s., and board and residence in the Hospital. Applications to the Secretary. (See advt.).

The Hospital for Sick Children, Great Ormond Street, London, W.C.—House Surgeon. Salary (for six months) £30, washing allowance £2 10s., and board and residence in the Hospital. Applications to the Secretary. (See advt.).

Manchester University.—Junior Demonstrator in Physiology. Salary £100 per annum. Application to the Registrar.

Essex and Colchester Asylum, Brentwood.—Assistant Medical Officer. Salary £160 per annum, with board, etc. Applications to the Medical Superintendent.

Great Yarmouth Hospital.—House Surgeon, Salary £100 per annum, with board, lodging, and washing. Richard F. E. Ferrier, Honorary Secretary, 33, Hall Plain, Great Yarmouth.

Gravesend Hospital.—House Surgeon. Salary £100 per annum, with board and residence. Applications to W. Pearson, Secretary.

Teignmouth Hospital, S. Devon.—House Surgeon. Salary £100 per annum, with board, lodging, and laundry. Applications to the Honorary Secretary.

Royal Asylum, Morningside, Edinburgh.—Assistant Physician. Salary £150 per annum, with board, lodging, etc. Applications to Physician-Superintendent.

Carmarthen Joint Counties Asylum, South Wales.—Second Assistant Medical Officer. Salary £160 per annum, with board, lodging, washing, etc. Applications to the Medical Superintendent.

Births.

BONHOTE HENDERSON.—On June 26th, at Salisbury, the wife (Katherine Smijth-Windham) of T. Bonhôte Henderson, M.A., M.B.,Oxon., F.R.C.S.Eng., of a daughter.

FAIRBANK.—On June 26th, at 84, Harley Street, W., the wife of H. A. T. Fairbank, M.S., F.R.C.S., of a son.

HATFIELD.—On June 27th, at York House, Park Road, Forest Hill, the wife of Harry F. Hatfield, M.R.C.S., of a son.

LETCHWORTH.—On June 29th, at 68, Claremont Road, Surbiton, the wife of T. W. Letchworth, M.B., F.R.C.S., of a son.

TOD.—On July 1st, at 11, Upper Wimpole Street, W., the wife of Hunter F. Tod, of a daughter.

TOOTH.—On June 26th, at 34, Harley Street, W., the wife of Howard H. Tooth, M.D., C.M.G., of a daughter.

Marriages.

LANDMAN—LIGHTMAN.—On June 26th, at the Belgrave Street Synagogue, Leeds, Julian Landman, M.D., of Highlands, 583, Finchley Road, London, N.W., eldest son of Mr. and Mrs. L. Landman, of 11, Brunswick Street, Leeds, to Lily, second daughter of Victor Lightman, Esq., J.P., and Mrs. Lightman, of the Towers, Roundhay, Leeds.

MURRAY—BLAKE.—On June 26th, at All Saints' Church, Ecclesall, Sheffield, Charles Grahame Murray, M.D., son of the late Alleyne Pilgrim Murray, and of Mrs. Murray, of Barbados, to Margaret Elizabeth, fourth daughter of the late Major Blake, J.P., D.L., and of Mrs. Blake, Mylnhurst, Sheffield.

Deaths.

BOTTRELL.—On June 23rd, at Eden House, St. Ives, Cornwall, James Francis Henry Bottrell, M.R.C.S.E., L.S.A., etc., aged 57 years, late of Villarrica, Paraguay, S. America.

MURRELL.—On June 28th, William Murrell, M.D., F.R.C.P., Senior Physician to Westminster Hospital, of 17, Welbeck Street, W.

SCOTT.—On June 26th, at Rumbold House, Ilkley, Thomas Scott, M.D.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, JULY 10, 1912. No. 2.

NOTES AND COMMENTS.

Insurance Act in Scotland.

THE annual meeting of the Edinburgh Branch of the British Medical Association, held last week, was marked by unanimous resolutions that must be viewed with apprehension by those hopeful of effective union in the ranks of Scottish medical men. The first resolutions ran:—"That the meeting express its extreme disapprobation of the action of Dr. Matheson Cullen, in accepting one of the paid medical officerships for Scotland under the National Insurance Act. (2) That the meeting express its strong disapproval of the action of Sir James Russell in agreeing to act on the Provisional Local Insurance Committee as medical representative at the Town Council of Edinburgh." The acceptance of both appointments, it is stated, is in direct antagonism to the declared and deliberate policy of the British Medical Association and the Scottish Medical Insurance Council. The branch think it right that the public should be informed that on account of the unfortunate methods of the Government the best men in the profession decline to serve under the Act, unless their reasonable demands are conceded. The unhappy "betrayal" at headquarters in London appears to be bearing bitter fruit in Scotland, but it may be confidently anticipated that those who will actually go the length of accepting posts under the Act, in spite of the cardinal points of protest, will be in a fractional and futile minority.

A Second Resolution.

THE Edinburgh meeting, however, expressed a further unanimous disapproval, the meaning of which we confess we are at a loss to understand. They thus condemned the action of Dr. Norman Walker, Direct Representative of Scotland in the General Medical Council, in refusing to place his resignation as a member of the Scottish Advisory Committee in the hands of the Scottish Medical Insurance Council, to be used if and when found to be wise and expedient, and to call upon him to explain to the profession his reason for such decision on his part. That a satisfactory explanation will be forthcoming it is hardly possible to doubt, in view of the long services and proved loyalty of Dr. Norman Walker to the profession. There must be some strong motive to induce him to take the position of being the only one of the eleven medical members of the Scottish Advisory Committee who has refused to give an undertaking that he will resign his position on the Advisory Committee if called upon to do so by the Scottish Medical Insurance Council. In any case, it would be impossible to doubt the straightforwardness and sincerity of Dr. Walker's motives, or that his refusal was prompted by any falling away from the spirit of loyalty which has placed him in his present representative position.

The Inner Mind of the Profession.

THAT genial humorist, Mr. Spencer Leigh Hughes, who for many years has furnished society with a perennial fount of wit and wisdom under the *nom de plume* of "Sub Rosa," has turned the searchlight of his analytic brain upon the medical profession. Simple as the problem may seem, it is in reality an extremely difficult thing to define the politics, the unwritten laws, the orthodoxy, the inner mind—call it what you will—of the medical world. Mr. Lloyd George turned to the British Medical Association and to a few political wire-pullers, and thought that after the little swim in surface waters he had gauged professional opinion to a nicety, but he has since found out his mistake. The motif of medical collectivism is not to be found in corporate bodies, which are for the most part in the hands of interested wire-pullers, but in the main ranks of the medical men of the Kingdom. How they are to be organised and taught to reduce their views to effective expression is the problem that now occupies the immediate foreground of the professional horizon. On that point no satisfying information can be at present offered either to Mr. Lloyd George or to the gifted writer, "Sub Rosa." At the same time, it is a comparatively easy enough matter to point out where they go astray in dealing wih medical affairs.

Medicine not an exact Science.

NOT long ago, "Sub Rosa" wrote an interesting column upon a bygone stage of medical gropings after truth. He mentioned the fact that sundry gross abominations were administered to the Charleses, father and son, and apparently sought to fix the stigma of the ignorance and credulity of that period upon a sort of mystic folly bred in the bone, so to speak, of the medical art. As a matter of fact, there was plenty of sound therapeutic wisdom and an abundance of good remedies known in the days of the Stuarts. The error of "Sub Rosa" seems to lie in his determination to regard modern medicine as an exact science. In point of fact, it is nothing of the kind. Medical knowledge is still like a tiny rivulet meandering through a vast unknown meadow, although, happily, with the process of centuries its banks are visibly and rapidly widening. However, there is one consolation to medical workers who are within the ranks of the regular army, to wit, that their practice represents the best available at any given time to human knowledge. Mr. Hughes is right when he points out that a great man like Robert Boyle (*circiter* 1650) advocated foolish abominations. Well, futilities of this kind have never been accepted permanently by the medical profession, and no great truth but has sooner or later been accepted in the medical world. That is, perhaps, after all, the most illuminating criticism that can be offered to lay writers upon medical philosophy.

The Alexandra Day Fund Grants. "Queen Alexandra Day" has come and gone in London, and another graceful anniversary has been added to the social calendar. A great deal of money has been collected for the benefit of the voluntary medical charities, and there is much to be said in favour of a movement which calls attention to the most beneficent and practical forms of modern philanthropy. At the same time, it may be well to ask on what principles the distribution of the money thus collected will be made. A correspondent has put the matter in a nutshell. Will the small and special hospitals be included in the grants, or will the Alexandra follow the example of the other great metropolitan funds (except the Saturday) and ignore the lesser institutions? As the money has come from the people it is only fair that part of it should go to the smaller organisations which every year provide so large an aggregate amount of skilled medical relief for the people of London. It is to be hoped that those responsible for the administration of the Alexandra Day Fund will insist on an equitable all-round distribution of grants.

LEADING ARTICLES.

THE BICENTENARY CELEBRATIONS AT TRINITY COLLEGE, DUBLIN.

THE festival held last week in Dublin was one of world-wide interest. That this was fully recognised was shown by the remarkable concourse of learned men who flocked from all parts of the world to do honour to a famous school of science. Distant Siberia, Japan, and Winnipeg sent delegations, who sat down with those from Belfast, from Cork, from Galway, and from all the universities and learned bodies of the Kingdom. The common message was one of congratulation on the past, and encouragement for the future. All were ready to recognise the achievements of the Dublin school in the past—in anatomy, in midwifery, in medicine, in surgery. All were equally ready to have confidence for the future. The concourse of learned men from all over the world on such an occasion as this is of help to the progress of science, though not a word be interchanged dealing directly with scientific matters. To younger men starting in their career, it is an inspiration to have merely seen some of the great ones of the earth, whose names are household words in the halls of science. To earnest workers the meeting with others working on the same or parallel lines is a help and an encouragement. But a festival such as that in Dublin teaches to the world a remarkable lesson of the community, the solidarity of the republic of science. It is a republic that knows no frontiers, that has no provincialism. All international jealousies are lost therein, all political differences disappear. The festival was worthy of the occasion, not only from the number and eminence of the distinguished men who travelled long distances to accept the invitation of the University to be present, but in the dignity of the programme arranged by their hosts. The noble buildings of Trinity College, the fine stretches of green sward, looked their best in the glorious weather with which the festival was favoured. It is doubtful whether any University College in the world is more fortunate in its site than Trinity College. In the heart of a great city, it has space such as might form a good-sized demesne for a country house. There is privacy in its gardens greater than in any in Oxford or Cambridge; there are vistas of trees and parks which almost delude one into believing himself in a quiet country-side. Not for twenty years—since the Festival of the Tercentenary of its Foundation—did the old College look so gay as last week. We give a detailed account of the various ceremonies of the festival elsewhere. Garden parties in beautiful surroundings, dinners in noble halls, academic functions of due solemnity, form a picture none who took part therein can readily forget. It was, moreover, a happy thought of the City of Dublin and its Lord Mayor to take a proper place in the celebrations. The city is the greatest benefactor in the history of the College. The Lord Mayor showed a constant interest in the celebrations, not only by his presence at many of the functions, but by his kindly loan of the dining-hall of the Mansion House for the Graduates' Dinner. It was pleasant, too, to find that among the warmest congratulations to the ancient College were those from her younger sisters, whom some have been so foolish as to regard as rivals.

THE ANNUAL ELECTION AT THE ROYAL COLLEGE OF SURGEONS, ENGLAND.

THE annual election of members to the Council of the Royal College of Surgeons, England, took place on the 4th instant. The occasion was somewhat noteworthy by reason of the number of vacancies which had been declared. Only rarely does it happen that the electorate is called upon to vote for four candidates, but this was the number whose election was necessary to fill the vacant seats. Naturally the opportunity was regarded as a favourable one among those desirous of the fame and honour generally supposed to belong to the membership of the Council of the College, and consequently a full list of candidates was presented. Three of the candidates were competing for re-election, namely Sir Frederic Eve, Sir Anthony Bowlby, and Mr. Gilbert Barling, of Birmingham; and the list was completed with four others. Out of this goodly list it is of interest to note the medical schools represented by the various candidates. Two of these latter were representatives of St. Bartholomew's, two of the provincial schools (Leeds and Birmingham), and one each of the London, St. Mary's and Guy's respectively. The successful candidates, declared by the President after the poll, were Sir Frederic Eve, Sir Anthony Bowlby, Mr. D'Arcy Power, and Sir Berkeley G. A. Moynihan. Thus Mr. Gilbert Barling failed to secure re-election, being seven votes behind the lowest successful candidate upon the list. The Council as at present constituted contains no fewer than five members of the surgical staff of St. Bartholomew's Hospital; of the Guy's staff there are four; of Middlesex, three; of St. Thomas's, two; of the London, two; of University College, two; and of St. Mary's, King's, St. George's, Bristol, Birmingham and Leeds, one each. The excessive proportionate representation of the St. Bartholomew's school casts, perhaps, some suspicion of unfairness when considered in respect to the other schools, and especially those in the provinces which are not represented upon the Council. But this disproportionate representation has practically always existed, so far as St. Bartholomew's is concerned. Nor is the explanation far to seek. The school is one of the largest in the metropolis; its *alumni* loyally support their teachers, and this loyalty is so maintained and practised, that almost upon every occasion, a member of the staff of the Hospital is assured of his election. Among the smaller medical schools, such a measure of support is naturally impossible—and thus the Council is apt to assume the position of a "close borough," confined mainly to the staff of the larger schools, to the exclusion of many representative surgeons by whom the honour would be filled no less worthily. It would, therefore, seem that some reform is desirable in this matter. Why should, say, the senior surgeon of a smaller hospital be debarred from successfully obtaining a seat on the Council because of the swamping of his support by the large schools? Membership of the Council in the present day does not imply the expression of any special political convictions; it is merely an honour, personal to the surgeon who holds it, with the additional attraction that it may lead to the Presidency of the College, a position which is rightly coveted. With regard, however, to the election of the President, a matter which rests entirely and exclusively in the hands of the Council itself, the Council has ever shown itself jealous of the dignity of the honour to which it has the power to dispose. To gain the Blue Riband of the surgical profession in this country is naturally an ambition to which the members of the Council aspire. Nevertheless, it is generally known that no friendships nor favour will secure that position for any member of the Council; hence disappointments in this regard have not infrequently occurred. The election is untainted by any personal considerations. The choice always falls upon the most representative surgeon who, for the time being, has a seat on the Council. Usually, of course, the surgeon is one who practises general surgery, but the rule is not adamant, as was shown in the case of Sir John Tweedy—the ophthalmic surgeon—who held the post for three successive years. Still, however, while we cannot point to any evil arising from the disproportionate representation of the medical schools on the Council, we believe that a useful reform would be to limit—if only by the time-honoured expedient of an unwritten law—the representation of each school. That would permit of the wider distribution of an honour from which many surgeons feel that they are excluded, by virtue of the fact that they represent the smaller medical schools.

CURRENT TOPICS.

The Economics of the National Insurance Act.

In our Correspondence columns we print an important letter from Dr. Angus Macphee, of Glasgow, who deals at length with the economics of the Act which occupies so much of the medical horizon. The moral which he enforces is that Mr. Lloyd George will have ample funds wherewith to pay the 8s. 6d. grant to medical men, and that it will not only be suicidal to accept any less sum, but will also constitute a disgraceful and disloyal act on the part of any practitioner who refuses to join his professional brethren in insisting upon that fair and reasonable fee. The main argument appears to be, that if friendly societies with 5,000,000 members contributing 7d. per week, pay management expenses, grant 4s. per member for doctor, and save, say, £30,000,000, how much more can the Insurance Act, with 15,000,000 members, contributing 9d. per week, and with only part of management expenses to pay, satisfy the medical demand of 8s. 6d. per head. The State, surely, does not want to make money at the expense of a poor profession like that of medicine. Those interested in the matter will do well to study the original letter of our correspondent. The Act comes into force within a few days, and it seems an extraordinary position that responsible politicians have still to be enlightened on the medical economics of the question. It is indeed time the public medical service scheme were safely launched.

The Neglect of the Home Spas.

The failure to appreciate aright home-grown industries and native resources constitutes one of those modern tendencies of which we have but little occasion to be proud. For some time past it has been considered fashionable to decry the average British spa, to magnify its alleged shortcomings, and to hold up the Continental watering-place as the model of health resorts for all time. The medical profession is, to some extent, responsible for this state of affairs. Is it not too often the case that a gouty, dyspeptic, or rheumatic patient is rushed off to one of the popular Continental spas to undergo some cure or other, without even so much as a thought of the claims of one of our own institutions? British balneologists are, naturally, somewhat indignant at this neglect of the home spas by the average practitioner, for it must be admitted by those who have any knowledge of the subject that hydrotherapy in all its aspects has been as scientifically developed in this country as anywhere in the world, though its evolution has taken place a little later. Foreign health resorts have had, therefore, a good start, but they are being rapidly overtaken by English spas. As Dr.

Charles Gibson remarked the other day at the annual meeting of the Yorkshire Branch of the British Medical Association, no European health resort can equal Harrogate for the variety and richness of the mineral constituents of its eighty springs. If this fact were more widely known upon the Continent we should have hosts of foreign visitors coming over to take the cures in this beautiful Yorkshire watering-place. There are many other famous springs and baths, such as those of Bath and Buxton, which are the pride and glory of hydrotherapeutists throughout the country.

The Dangers of Primitive Scavenging Methods.

We have, on several previous occasions, called attention to the grave risks to health associated wih the collection of house refuse as ordinarily carried out by means of the open dustcart. This archaic vehicle, with its still more ancient-looking baskets, is still to be seen even in fashionable West-End thoroughfares, scattering its contents broadcast on hapless passers-by with every gust of wind. A recent letter from the pen of Mr. Harrison Cripps, published in the *Daily Mail,* should awaken public attention in the matter, which should not be allowed to degenerate into the usual aimless correspondence upon health matters that is wont to appear in the daily Press at or about this season of the year. Clearly, many of the present methods of scavenging are wholly at variance with modern sanitary ideas, and the sooner a more hygienic system is adopted, the better for the health of the public. The first thing to do is to abolish absolutely the old-fashioned dustcart with all its grimy appurtenances. The galvanised iron receptacles now commonly supplied to every household should simply be collected and emptied at the place of sorting, a clean and empty bin being left in its place. Presumably, the extra expense and trouble that would doubtless be connected with this system would be matters of greater consideration, even by so-called enlightened borough councils, than the health of the community. Street sweeping and scavenging are of little use if one great source of dust, with all its contained disease-germs, is still allowed to remain unremoved.

Inebriety in Fiction.

It has become to be almost a truism that when novel writers indulge in descriptions of diseases, their symptoms and treatment, they often become hopelessly entangled. In intending to pourtray the characteristics of medical life and practice they again often leave the critical reader in a state of bewilderment. Unless the author be himself a medical man, or unless the collaboration of the latter be sought on professional details, it is seldom, indeed, that glaring mistakes of this kind will not be found somewhere within the pages of even the most up-to-date work of fiction. With regard to alcoholism, Mr. Guy Thorne, author of "The Drunkard "(*a*), while acknowledging the changed attitude of novel writers on the whole towards inebriety during the last thirty or forty years, finds that the psychological aspect of this problem has been almost enirely neglected. Neither the masterful realism of a Zola nor the glowing delineation of a Besant really deals with the mental state of the chronic inebriate, nor reveals the innermost workings of his morbid brain. What is urgently wanted in these days of popular fiction is the novel that discusses these conditions sanely, accurately, and, above all, written in an attractive style. This may be regarded, perhaps, as ideal, but it is the only way in which medical teaching and influence can be reinforced by fiction.

Red Cross Work in China.

It is always gratifying to receive praise for work well done, and when this recognition comes from foreign sources for medical services rendered, it is worth recording in the pages of a medical journal. In the course of a letter from Dr. S. Y. Ho, Surgeon-General to the Northern Forces of the Chinese Republic, sent from the War Office at Pekin to the London Missionary Society thanking that Society for its efficient Red Cross work during the recent revolution, the following passages occur :—"We must thank you for your valuable aid and benevolent work done to our poor refugees and wounded soldiers from the outbreak of the revolution in Hankow till the end. Over one-third of our total wounded Northern troops were admitted to your hospital and treated under your care. Many lives were saved, and about 90 per cent. left with complete recovery. The necessity and value of prompt and efficient first aid in injuries needs no comment, as the fate of an injured person depends upon the acts of the person into whose hands he first falls. By the prompt application of first-aid dressings and proper treatment, the loss of life and limbs has been reduced to the lowest ratio in the whole history of warfare." This praise addressed to Dr. Fowler necessarily includes the trained Chinese Christian helpers who gave him much efficient assistance, and it is also a feather in the cap of the medical staff of the London Missionary Society.

The Passing of the Apothecary.

Many changes have taken place in the mode of evolution of the medical practitioner, even in the course of a single generation. It has become customary to allude to these gracefully and apologetically in the course of public addresses to medical students who are apt to plume themselves in consequence as being so much better fellows than their predecessors of the Victorian age. To one of these changes Lord Rosebery referred last week in the course of a speech delivered at the London Hospital upon the occasion of the annual prize distribution, namely, the practical extinction of the apothecary of fifty years ago. This familiar individual of the period was reckoned to be a "great medicine-man," as the Indians would call him, in the most literal sense of the word, for he lived among drugs, and would compound them himself daily. The abolition of the art of dispensing as part and parcel of the routine work of so many medical men, has, no doubt, reacted favourably upon the practice of medicine as a whole, but it has its disadvantage of depriving the practitioner of that intimate knowledge of pharmacy which seems to form a connecting-link between himself and the patient. There is now scarcely any need for a medical man to be

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(*a*) *British Journal of Inebriety,* July, 1912.

acquainted with even the rudiments of dispensing, unless he intend to practise in a very remote country district, for his incompatibles, should he be guilty of prescribing such, and even his doses will be checked by his ever-watchful dispenser. The medical man who makes up his own medicines at least knows the contents of each bottle, and he cannot help seeing their colour and general appearance. The advantage of this is obvious when he is asked by Mrs. Jones for some more of the "splendid brown medicine she had about nine months ago." If, as Lord Rosebery implied, the apothecary as a type has gone in name, his spirit is not yet dead, nor, we believe, is it ever likely to be.

Surgical Auto-Operation.

The annals of surgery record several striking instances of surgeons performing serious operations upon their own bodies. Such a proceeding could be humanly possible only under the special conditions provided by the modern method of producing local anæsthesia. The most recent incident of the kind comes from Toulon, where Admiralty Surgeon Regnault is reported to have performed an operation upon himself for inguinal hernia on the left side at the Hospital of St. Maudrie. Propped up by cushions on the operating table, he is described as administering to himself an injection of cocaine, after which he proceeded calmly to carry out the necessary surgical procedure under the supervision of his colleagues, Drs. Gastinal and Dufour, assisted by several students. The operation is stated to have taken an hour and a-quarter, and during its performance several photographs were taken. The distinguished surgeon is now convalescent. An incident of this kind demonstrates the power of inflexible will and the marvellous confidence which inspires the hand of the experienced surgeon. Under some circumstances it might be necessary or desirable for a surgeon to undertake the serious responsibilty involved in performing a major operation upon his own *corpus vile*, but where skilled surgical aid is obtainable, the practice is not to be commended, even though the world be enriched with moving pictures of drama showing human nature in one of the highest conceivable positions of acquired self-control and resolute bravery.

PERSONAL.

H.R.H. Princess Christian opened, last week, the Cottage Hospital, which has been erected as a memorial to King Edward at Haywards Heath.

The Duke of Devonshire opened at Buxton, last week, the reconstructed Pump Room, which contains the famous St. Ann's Well.

Mr. Robert Davies-Colley, M.A., M.C.Cantab., F.R.C.S., has been appointed an assistant Surgeon to Guy's Hospital.

Dr. Barclay-Smith has been reappointed University Lecturer in Advanced Human Anatomy in the University of Cambridge.

Dr. Hildred B. Carlill, M.A., M.D., M.R.C.P., has been elected Medical Registrar and Tutor at the Westminster Hospital.

The appointment of Dr. R. Henslowe Wellington as Deputy-Coroner for the South-Western District of London has been sanctioned by the chairman of the County Council.

Dr. W. E. Robinson, M.D., B.Ch.Oxon., has been appointed Visiting Anæsthetist to the Royal Waterloo Hospital for Children and Women.

Mr. F. J. Steward, M.S., F.R.C.S., Senior Assistant Surgeon to Guy's Hospital, has been appointed to the full staff.

Dr. C. Gibson, of Harrogate, has been elected President of the Yorkshire Branch of the British Medical Association for the ensuing year.

Dr. Basil Kilvington has been appointed an Examiner in Surgery in the University of Melbourne, in the place of the late Mr. Rennie.

Mr. S. W. Daw, M.B., B.S., F.R.C.S., has been appointed Surgical Registrar at the General Infirmary, Leeds, and Surgical Tutor, Leeds University.

Mr. C. J. Symonds, M.D., M.S., F.R.C.S., has been appointed Consulting Surgeon to Guy's Hospital, upon his retirement from the post of Senior Surgeon thereto.

Dr. Hugh Kerr Anderson, F.R.S., Fellow of Gonville and Caius College, Cambridge, has been elected to the Mastership thereof in succession to the late Rev. E. S. Roberts.

Dr. E. U. Bartholomew has been awarded the Chesterfield Silver Medal in Dermatology for 1912, after examination at St. John's Hospital for Diseases of the Skin.

Among the recipients of the honorary degree of LL.D. of the University of Edinburgh last week were Sir James Porter, C.B.; Professor J. T. Cash, F.R.S., of Aberdeen; and Professor W. C. M'Intosh, F.R.S., of St. Andrews.

Dr. James Martin Beattie, of Sheffield University, has been recommended for appointment as Bacteriologist to the City of Liverpool by the committees of the various public bodies most intimately concerned in bacteriological work.

Mr. Arthur Ernest Hayward, M.R.C.S., L.S.A., of Teignmouth, was presented the other day with a handsome ivory and ebony walking-stick by the poor of the district upon the occasion of his leaving the neighbourhood to go to Australia.

Professor Charles Chilton, M.A., D.Sc., M.B., C.M., Professor of Biology and Palæontology at Canterbury College, University of New Zealand, has recently been the recipient of the honorary degree of LL.D. of the University of Aberdeen.

Dr. William Robinson, founder and chairman of the Society for the Prevention and Cure of Consumption in the County of Durham, was recently the recipient of a handsome silver salver in recognition of his valuable services in connection with this department of preventive medicine.

At a special meeting of the Royal College of Surgeons of Ireland on Thursday last the honorary Fellowship of the College was conferred on Mr. Robert Jones, F.R.C.S., Liverpool; Sir William MacEwen, Glasgow; Sir Henry Morris, F.R.C.S., London; Sir Lancelot Gubbins, Director-General, Army Medical Service; and Professor Irving Cameron, M.D., Toronto.

Surgeon Lieutenant-Colonel William Taylor, M.D., L.R.C.P., M.R.C.S., L.S.A., J.P. for Glamorganshire and Cardiff, a former Mayor of Cardiff, lately president of the South Wales and Monmouthshire branch of the British Medical Association and of the Cardiff Medical Society, and consulting physician to the Cardiff Infirmary, who died off the coast of Greece on May 8th, aged 82, left estate of the gross value of £55,519, of which £20,091 is net personalty.

A CLINICAL LECTURE
ON
THE TREATMENT OF DYSPEPSIA. (*a*)

By W. H. WILLCOX, M.D., F.R.C.P.,

Physician to Out-Patients, St. Mary's Hospital, Paddington.

[Specially Reported for this Journal.]

The term Dyspepsia means, according to derivation, difficulty of digestion, and it is synonymous with the common term "Indigestion." In considering the treatment of dyspepsia, it is proposed to consider the treatment of those cases where the most common symptoms are such as would reasonably be represented by the term Dyspepsia or Indigestion, and where on account of the symptoms of supposed dyspepsia or indigestion the patient seeks medical advice.

It will be generally admitted that the symptoms included under the term dyspepsia or indigestion are of exceedingly common occurrence, and perhaps there is no condition for which medical treatment is more often required.

Before a case of dyspepsia can be successfully treated, it is essential that the ætiological factors should be thoroughly understood, since the treatment of the patient will depend entirely on the pathological condition which has given rise to this group of symptoms.

Dyspepsia, or indigestion, is the prominent symptom, or group of symptoms, in a very large number of diseases, and unless this fact is clearly borne in mind, mistakes—or, rather, omissions—in diagnosis are bound to be made.

In every case of dyspepsia it must be remembered that the symptoms of which the patient complains are due to some pathological cause, and it is this primary ætiological condition which demands treatment. It is the cause, and not the symptoms, which must be treated.

The following table gives a summary of the principal causes of dyspepsia or indigestion :—

I. Local Pathological Conditions of the Alimentary Tract.

Such as Abnormal conditions of the mouth, stomatitis, pyorrhœa alveolaris, etc. Abnormal conditions of the pharynx, naso-pharynx and œsophagus.

Dietetic indiscretions, Abnormal conditions of the stomach, such as gastritis (either acute, sub-acute, or chronic), dilatation of the stomach, gastroptosis, gastric and pyloric ulcer, carcinoma, hypertrophic pyloric stenosis.

Abnormal conditions of the intestinal tract, such as enteritis or colitis (whether catarrhal or due to a specific infection).

Growth of the Bowel, Inflammatory conditions of the bowel, such as appendicitis, etc.

Enteroptosis, Any cause giving rise to intestinal obstruction, such as hernia (whether external or internal), volvulus, intussusception, kink of bowel from adhesions, Meckel's diverticulum, etc.

Abnormal Conditions of the Peritoneum, such as acute, sub-acute, or chronic peritonitis, adhesive peritonitis, growths involving the peritoneum, etc. Abnormal conditions of the liver, gall-bladder, spleen, pancreas, Moveable kidney, etc.

II. Bacterial Infections giving rise to Toxæmia.—One of the common symptoms of these conditions is dyspepsia. Examples are the dyspepsia of early phthisis, the dyspepsia which is often the onset of the various infectious diseases; the dyspepsia associated with the septicæmia or pyæmia of various bacterial infections.

III. Auto-intoxication.—In many diseases, owing to various reasons such as defective excretion, or defective production of internal secretion, or defective metabolic processes of various kinds poisons accumulate in the body and give rise to an auto-intoxication or toxæmia. The prominent symptom in many of these cases of auto-intoxication is dyspepsia. Examples are :—Renal disease, with uræmic dyspepsia; Addison's disease; gout; diabetes, where dyspepsia is often the early symptom of threatening coma; acute yellow atrophy of the liver; recurrent vomiting of children; acid intoxication from various causes.

IV. Toxic Causes due to Chemical Poison of various kinds, *e.g.*, Corrosive and Irritant poisons, also poisons which, by their action after absorption, produce symptoms of dyspepsia without causing any definite local effect. This includes an enormous number of substances. Examples are :—Alcohol; Lead, copper, zinc, and other metallic poisons to which industrial workers are specially liable; Tobacco; Anæsthetics generally and their after-effects, including delayed chloroform poisoning. Drugs derived from Benzene and its compounds, such as salicylic acid, aceto-salicylic acid, acetanilide, etc. This group includes many of the drugs which are so commonly taken in tabloid form.

Gaseous poisons, such as the atmospheric impurities of over-crowded rooms; impurities arising from escapes of coal gas, or from the leakage of the products of combustion, into the air of rooms owing to the use of gas fires or stoves or heating apparatus of various kinds where the products of combustion are not carried off; escapes of sewer gas due to defective sanitation, etc.

V. Nervous Causes—*e.g.*, Reflex irritation of various kinds may give rise to dyspepsia, Cerebral tumour and intra-cranial lesions generally, such as meningitis, abscess, etc.; Migraine; Gastric crises associated with tabes dorsalis, general paralysis and other nerve diseases; Gastric crises of angio-neurotic œdema.

VI. Diseases of the Circulatory and Respiratory Systems.—These are frequently associated with dyspepsia, owing to the venous congestion of the abdominal organs present, and also because not infrequently a condition of acute dilatation of the stomach may arise in cases of severe morbus cordis. Then again the vascular changes of arterio-sclerosis and resulting high blood-pressure are often associated with dyspepsia.

VII. Blood Diseases—*e.g.*, Chlorosis, Pernicious anæmia, Leukæmia, Splenic anæmia (a special type of which is Banti's disease), Lymphadenoma. In these conditions one of the commonest of the early symptoms for which medical advice is sought is dyspepsia.

VIII.—Pregnancy.—In the first two or three

(*a*) Lecture delivered at the Medical Graduates' College and Polyclinic, June 3rd, 1912.

months severe dyspeptic symptoms are common, and these symptoms sometimes persist so that the vomiting of pregnancy may become a serious complication, leading to the necessity of surgical treatment. Pregnancy also often causes nephritis, with its associated uræmic dyspepsia.

IX. Functional Dyspepsia.—Here the symptoms are due to neurosis, and have no gross organic lesion to account for them.

Examination of the Patient.

A review of the above list of the important causes of dyspepsia makes it evident that before attempting to treat a case a systematic and careful examination is necessary in order that the treatment may be carried out on ætiological lines.

Thus, a careful history must be obtained of the symptoms; the possible bearing of the patient's occupation on the cause of the symptoms must be carefully considered. This is especially important in relation to toxic chemical poisoning—*e.g.*, alcohol, lead, and metallic poisoning, etc. The duration of the symptoms and their relation to food must be carefully gone into; also, the way in which the symptoms are affected by variation in the kind of food.

The tongue, teeth, gums, mouth, pharynx, and naso-pharynx must be examined.

The abdomen should be carefully examined, and the presence of any tenderness or resistance noticed; also, the presence of any abnormal lump in the region of the stomach should be looked for. Watch should be made for the presence of any peristalsis either of the stomach or bowel. Careful examination for any sign of enlargement of the liver, spleen or kidneys should be made, and any abnormal mobility of the kidneys should be noticed. Careful search must be made for any abnormal tumour in the abdomen.

By percussion and by combined auscultation and percussion, the outline of the stomach should be mapped out as closely as possible, and any dilatation or gastroptosis noted.

The state of nutrition, temperature, weight, and general appearance of the patient should be carefully noted. The heart and the circulatory system should be examined, and if the blood pressure appears abnormal, it should be measured by an appropriate instrument.

The blood should be examined if there is any special indication, such as anæmia or glandular or splenic enlargement. The respiratory system should be examined. The urine should be carefully examined for evidence of any renal disease, diabetes, gout, etc., and especially in cases where acid intoxication is suspected it should be tested for acetone and diacetic acid.

Examination should be made for the presence of any enlarged lymphatic glands. The nervous system should also be examined, and any abnormal signs noted. If headache is associated with the dyspepsia, then ophthalmoscopic examination for optic neuritis should be made. If pregnancy is the suspected cause, its signs must be looked for.

After a careful and thorough investigation of the case, usually an opinion can be formed as to the true cause of the dyspepsia, and then the appropriate line of treatment is indicated. I do not propose to consider in any detail the treatment of cases of dyspepsia other than those which arise from primary gastric causes. Thus, in the dyspepsia of bacterial infections, it is the toxæmia of the infection which requires treatment on the usual lines. In the dyspepsia due to auto-intoxications—*e.g.*, renal disease and gout—these conditions must be treated on the usual lines. In Addison's disease treatment is not likely to be of much avail. In pancreatic diabetes it must be borne in mind that dyspeptic symptoms frequently are of grave omen, and precede the threatening coma of acid intoxication. The acid intoxication requires active treatment on the usual lines. In cases of dyspepsia due to recurrent vomiting or acid intoxication of various kinds, it is well to stop food by the mouth until the vomiting ceases, and to give large doses of alkalies by the mouth—*e.g.*, half-drachm doses of bicarbonate and citrate of soda in an ounce of water—every three hours; also a dose of calomel and saline purgative should be given. Normal saline containing 3 per cent. of glucose should be given by the bowel, 10 oz., every four hours. After the acute symptoms have subsided, careful dieting of the patient is necessary; thus, whey, lemon-water, citrated milk may be given, and later fruits, vegetables, and farinaceous food, with milk and butter, may be allowed. Meat, fish, eggs, soup and meat extract should be carefully avoided.

Treatment on the above lines of cases of acid intoxication is usually successful. These cases often present themselves as severe cases of acute dyspepsia, and unless care is taken they may be mistaken for functional dyspepsia. It is essential that the true cause should be grasped, for otherwise there is often grave danger from the acid intoxication present. The treatment of those cases due to chronic toxic chemical poisoning is, in the main, hygienic and prophylactic, the patient being placed under healthy conditions of life, and removed from any possible further poisoning. Cases of acute chemical poisoning require treatment on the usual lines, which it is not proposed to consider.

Cases of dyspepsia due to nervous causes require treatment of the nervous disease on the usual lines. Where there is any reflex irritation giving rise to the symptoms, this should be removed as far as possible. Cerebral conditions require treatment on appropriate lines.

The gastric crises of tabes or angio-neurotic œdema require treatment by local applications, such as warmth, sinapism, etc. Food by the mouth should be withheld.

Phenacetin may be given for two or three doses, or a dose of some powerful carminative mixture may be given—*e.g.*:—

Tinct. card. co., 1½ dr.
Tinct. zingib., ½ dr.
Tinct. capsici, 10 m.
Spt. ætheris, ½ dr.
Spt. chlorof., 15 m.
Aq. menth. pip. ad. 1 oz.
Every two hours.

If the pain continues morphia must be given hypodermically—*e.g.*, 1-5th grain, repeated if necessary.

Treatment of the tabes dorsalis or of the angio-neurotic œdema is very important in preventing the recurrence of these attacks of gastric crises.

Migraine is often associated with acid intoxication, and, if so, treatment on the lines above indicated—namely, purgation, administration of alkali, and a proteid-free diet—are indicated.

Dyspepsia due to diseases of the circulatory and respiratory system is best dealt with by treating the causal condition. The treatment of acute dilatation of the stomach, which sometimes occurs in these conditions, is referred to below.

The dyspepsia of blood diseases is best dealt with by the administration of remedies to benefit the causal condition.

In chlorosis, dyspepsia is an almost constant symptom. It must be remembered that chlorosis is usually associated with hyperchlorhydria; therefore, alkalies with the bland preparations of iron are indicated—*e.g.*:—

Sod. bicarb., 20 gr.
Ferri amm. cit., 5 gr.
Spt. chlorof., 10 m.
Inf. aurantii, 1 oz.
t.d.s.

To this may be added, liq. arsenicalis, 3 m.

Nourishing, easily digestible diet—*e.g.*, milk, fish, eggs, chicken, etc.—and aperient medicines may be taken. General hygienic conditions are most important.

In pernicious anæmia the gastric secretion is almost entirely free of hydrochloric acid and ferments. The best result in this condition will be obtained by giving after food, pepsine and hydrochloric acid—*e.g.*:—

Liq. arsenici hydrochl., 3 m.
Glyc. pepsin, 1 dr.
Acid hydrochlor. dil., 15 m.
Tinct. card. co., 1 dr.
Aq. chlorof., add 1 oz.
t.d.s., p.c.

Or the tablet preparations containing pepsin and hydrochloric acid, such as lacto-peptine or acidol pepsin, may be prescribed. The food should be nourishing; milk, eggs, Benger's Food, meat juices, and peptonised food should be given. Preparations of hemoglobin should be given. Of course, the other methods of treatment—such as rest, the remedying of toxic conditions of the mouth, the increasing of the dose of arsenical preparation given, intestinal antiseptics, etc.—require great attention.

Cases of leukæmia, lymphadenoma, splenic anæmia require treatment on lines similar to those laid down.

The Treatment of Dyspepsia Due to Diseases of the Alimentary Tract.

In every case any abnormal condition of the mouth should be remedied; carious teeth should be removed, pyorrhœa alveolaris should be treated. If there is some dysphagia, or if the symptoms of dyspepsia come on so quickly after food that œsophageal obstruction is suspected, then investigation should be made by passing a bougie, after carefully excluding the possibility of aneurysm. In cases of carcinoma of the œsophagus commencing near the junction of the œsophagus and stomach, the symptoms are those of chronic dyspepsia, the dysphagia often being only very slight. In cases of dyspepsia due to affections of the stomach, one has to consider the treatment of cases of acute dyspepsia of short duration, and cases of chronic dyspepsia.

ACUTE DYSPEPSIA.

This may be due to *dietetic indiscretions.* Here it is usually sufficient to withhold food by the mouth, and to give an aperient such as calomel, 2 gr., followed by a saline aperient. In severe cases an emetic of a dessertspoonful of powdered mustard in a tumblerful of warm water, or 30 gr. of carbonate of ammonia in half a tumbler of water may be given. Or the stomach may be emptied by the passage of a long soft stomach tube, and then washed out with warm water.

Acute Gastritis.—In this the pain may be relieved by hot applications to the epigastrium; the application of a mustard leaf, or mustard poultice, or the ice-bag. Food should be withheld for 24 hours. The stomach should be emptied either by the induction of vomiting after drinking warm water, or by the giving of a simple emetic, or by washing out with a soft tube. Calomel, 2 gr., with bicarbonate of soda, 5 gr., should be given after the stomach is emptied. Nausea may be relieved by giving a mixture of:—

Bism. carb., 15 gr.
Sod. bicarb., 15 gr.
Ac. hydrocyan. dil., 3 m.
Spt. chlorof., 10 m.
Aq. menth. pip., ad. 1 oz.
4 tis horis.

In cases where the pain is very severe, it may be necessary to give a hypodermic injection of morphia 1-5th gr., or liq. morph. mur., 10 m., may be added to the bismuth mixture. Morphia should be avoided where possible. After the vomiting has subsided, liquids may be given—*e.g.*, albumen water (made with the whites of three eggs added to one pint of normal saline containing 1 oz. of milk sugar), or whey, or citrated milk ($1\frac{1}{2}$ gr. of citrate of soda to the ounce of milk). The quantity of liquid given should be a tablespoonful an hour at first, and gradually increased. In the case of young children, calomel, $\frac{1}{2}$ gr., with sod. bicarb., 4 gr., should be given, and repeated in six hours if necessary. Two drachms of the above bismuth mixture may be given. No milk should be given, but a little albumen water or normal saline, with 4 per cent. of milk sugar, may be given in doses of one tablespoonful an hour, and gradually increased.

If there is collapse, normal saline must be given subcutaneously or by the rectum.

Acute Dilatation of the Stomach.—In this condition the stomach should be at once emptied by means of the soft stomach tube, and the stomach washed out with warm water. The treatment should be repeated in three hours if necessary. Collapse must be treated by hypodermic injection of strychnine, 1-30 gr., or pituitary extract. Normal saline, 10 oz., may be slowly given by the bowel, and repeated every four hours. If necessary, the saline should be given subcutaneously. No food should be given by the mouth for 24 hours, and then the feeding should be as described under acute gastritis.

(*To be concluded in our next.*)

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal The lecture for next week will be by W. H. Willcox, M.D., F.R.C.P., Physician to Out-Patients, St. Mary's Hospital. Subject: "The Treatment of Dyspepsia."*—(*Concluded.*)

ORIGINAL PAPERS.

ERYTHEMA NODOSUM AND TUBERCULOUS MENINGITIS.

By A. SEZARY, M.D.,
Medical Registrar to the Faculty of Medicine of Paris.

[Specially Reported for this Journal.]

The close relationship of erythema nodosum to tuberculosis is now well known—in fact, although every such case of erythema nodosum is not necessarily of bacillary origin, every such case not shown to be due to some other cause is tuberculous *in posse.* This relationship was first pointed out by Dr. Landouzy on the strength of purely clinical observation akin to that which led him to assert the tuberculous nature of the so-called primary pleurisy, that is to say, erythema nodosum is sometimes met with in subjects recognised to be tuberculous, but more frequently in the subjects of latent or torpid lesions.

Attempts to provide anato-pathological data in support of this statement have not been very successful. Chauffard and Troisier claim to have determined erythema nodosum by intra-dermic injections of tuberculin, but in reality they determined a dermatosis, and not this particular dermatosis. Then, too, the reaction is not always positive. I myself have noted that it can be provoked in subjects who have never had erythema nodosum, and particularly in two cases of obese tuberculous subjects. The result seems to depend far more on the special cutaneous reaction of the subject than upon the particular agent employed.

It follows that, apart from the possibility of obtaining bacteriological confirmation, the doctrine of the bacillary origin of certain nodular erythemata reposes almost exclusively on clinical data, which for that matter amply suffice to carry conviction.

The question therefore arises in respect of erythema nodosum just as in respect of pleurisy—viz., as to the future of patients thus affected. It is from this point of view that I should like to insist more particularly on a point of considerable interest—viz., the frequency of tuberculous meningitis in subjects, especially in children, who have had erythema nodosum.

My attention was attracted to this point by a case that came under my observation in February, 1910. The patient was a little girl, eight years of age, with well-marked erythema nodosum on the legs, accompanied by moderate rise of temperature that lasted three days. Examination of the lungs revealed unquestionable tracheo-bronchial adenopathy on the left side, with rough jerky breathing at the apex. Ultimately the little patient made a good recovery, and although still delicate, appeared to be in good health. Early in July I saw her again when she was manifestly unwell, was losing weight, had an evening temperature and had night sweats. The stethoscopic signs were the same as on the last occasion. She developed tuberculous meningitis to which she succumbed a month later.

Plenty of similar cases are on record in medical literature, though the sequence of events is not always the same. It is now currently admitted that erythema nodosum may be followed by, or culminate in, acute tuberculosis. Some authors, however, go still further, and state that it is sometimes the early symptom of an attack of tuberculous meningitis.

Erythema nodosum of bacillary origin, therefore, may complicate an attack of tuberculous meningitis actually in being, or it may antedate it some weeks or months. This is a fact of great clinical importance because it raises the question whether it may not be possible by appropriate measures to reinforce the resistance of the organism and so prevent the invasion of the meninges. It follows that a child who has had erythema nodosum must be regarded as a candidate for tuberculous meningitis, so that the eruption affords a valuable therapeutical indication.

We may well ask why it should be that tuberculous meningitis so frequently occurs in the course of an attack of erythema nodosum. Of this there are two possible explanations. To begin with we know that tuberculous meningitis is one of the commonest manifestations of the infection in the young, consequently it may be that erythema nodosum and meningitis are both consequences of a septicæmia which, apart from its cutaneous distribution, has a marked predilection for the meninges. The two structures may be attacked simultaneously or after an interval of several weeks or months. This hypothesis presupposes that the eruption is itself of a bacillary or toxic origin. Another explanation is afforded by rejuvenating the angioneurotic theory brought forward by Lewin, and suggesting that erythema nodosum may be the cutaneous manifestation of an imperfect meningeal syndrome, possibly of bacillary origin. We are all cognisant of the preponderant influence of the nervous system in the pathogenesis of dermatoses, some of which, Brocq's so-called cutaneous reactions, are manifestly of nervous origin. We know also that purpura, which often supervenes under very similar circumstances to those under which erythema nodosum occurs, and which, indeed, may be associated with the latter, is consequent upon a nervous lesion or some meningeal irritation which causes the eruption, and a hepatic lesion which determines the hæmorrhagic character.

Since the tuberculous nature of the eruption cannot be proved, either histologically or bacteriologically, the nervous hypothesis comes to the fore. Now the nervous lesion may be the meningitis *per se* or it may, as in tuberculous zona, consist simply in the meningeal reaction, as revealed by lumbar puncture. The latter, in spite of its innocuousness, may play a prominent part in the subsequent supervention of the meningitis by rendering the meninges more sensitive and more vulnerable to the tubercle bacillus. The latter, in the subjects of bacillosis, may be assumed to be specially amenable to the bacillus in presence of an outburst of bacillæmia. This hypothesis is analogous to, but not identical with, that put forward by Landouzy and others to explain the pathogenesis of bacillary arthrites.

In support of this hypothesis, we may recall the interesting case placed on record by Pons, who, having injected tuberculin in a patient suspected to be tuberculous, witnessed the supervention of grave nervous symptoms: violent headache, photophobia, diplopia, stiffness of the neck, hyperæsthesia, delirium and tachycardia. These symptoms, which pointed to the existence of meningitis, subsided a few days later, but two days after this improvement erythema nodosum made its appearance. In this instance the dermatosis was clearly consequent upon the nervous irritation.

If, therefore, we regard the influence of the nervous system as predominant in the pathogenesis of erythema nodosum (and this view concords very well with the general pathology of the dermatoses) the frequency of the supervention of tuberculous meningitis in this connection is easily explained by the hypothesis of nervous irritability just referred to.

However this may be with regard to the question of pathogenesis, it is our duty to bear in mind the fact that tuberculous meningitis is a common sequel of erythema nodosum, so that our prognosis should be extremely guarded.

EXTRA-UTERINE PREGNANCY, WITH SPECIAL REFERENCE TO ITS DIAGNOSIS AFTER RUPTURE OR ABORTION:

ILLUSTRATED BY SEVEN CONSECUTIVELY OCCURRING CASES.

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So much having been written on extra-uterine pregnancy and the condition having been so thoroughly studied, it might reasonably be assumed that, at this date, its symptoms could, as a rule, be readily recognised and its diagnosis be as readily assured. Such an assumption would, however, be far from accurate. Although there are cases characteristic enough to be determined almost immediately by the least experienced practitioner, there are many others so puzzling and atypical that their nature can be settled only after an exhaustive examination and by a process of exclusion. Great skill may become acquired in diagnosing the diseases of the female pelvic organs, but it is frankly admitted by even the most experienced gynæcologists that the road to accurate determination of the presence of extra-uterine pregnancy is so beset with pitfalls that they occasionally fall or go astray. For this very reason there is in this abnormal condition an element of interest wanting in others, such as uterine fibroids or ovarian cysts, which are so much more readily recognised. When to this uncertainty there is added the wonder and mystery of a pregnancy existing anywhere except in the maternal womb it can be no matter for wonder that almost every example of extra-uterine pregnancy is fraught with the deepest interest.

It must always be remembered that extra-uterine pregnancy is not to be dismissed as unworthy of serious consideration on account of extreme rarity, although even if it were very uncommon it might yet be the lot of any practitioner to be in a moment confronted with a case. It has indeed been asserted that there is an increase in its frequency, but probably this is more apparent than real, and the true explanation of this belief is that it is now more commonly recognised on account both of greater proficiency in diagnosis and more frequent abdominal section. Whatever the truth may be, it is indubitable that, since its first recognition by Albucasis in the eleventh century until now, thousands of examples have been seen, and more especially since Lawson Tait performed his first successful operation upon a ruptured pregnant tube twenty-nine years ago.

Two points in relation to extra-uterine pregnancy must therefore be borne in mind by every practitioner. The first is that there are many difficulties in diagnosing it, and the second, that it is by no means uncommon occurrence. It follows, in consequence, that the conditions leading to error in judgment ought to be definitely known, that the absence of one or more of the "characteristic" signs and symptoms should not mislead, and that the possibility of its occurrence under the most unlikely circumstances should always be borne in mind. Perhaps a third counsel should be given—namely, to recognise it, if possible, either before or very soon after rupture or tubal abortion has occurred. This adds in many instances largely to the patient's chances of recovery.

The difficulties of diagnosis have lately been brought home to me by seven consecutive cases coming under my care within the last few months. Each of them furnished an illustration of some particular difficulty, and some were unusually puzzling. All possessed features of interest worthy of brief record.

1. This one was fairly typical in history and symptoms, but yet was not recognised at first, and the patient, after two attacks of pain, went about as usual, walking and riding in street cars, while in her pelvic cavity there was a tube distended with blood clot in the midst of which a fœtus was embedded.

Mrs. A., 36, had been married twice. By the first marriage she had five children, the youngest being nine years old. Labours and puerperia had been normal except the fourth, when there was puerperal septicæmia, after which there had always been some dull left-sided pain. From the second marriage, five years ago, there were no children and no miscarriages. Menstruation was normal in every respect, but had ceased three and a half months before I was consulted. Morning sickness was present. About ten weeks after the onset of amenorrhœa there was a severe and sudden attack of sharp, labour-like pains in the lower abdomen. It lasted about six hours, passing away gradually, and was followed for four days by bleeding like that of an ordinary menstruation. In a few days there was a second attack of cutting, irregularly recurring pains, after which a dull ache was felt in the left side. She was not confined to bed for more than a few days, and when her doctor arranged that she should consult me she called at my house. She was healthy-looking, complained of a moderately severe pain in her left side, and wished to know if she had actually had a miscarriage, and if so, if everything was away.

Examination showed the uterus in normal position, slightly enlarged, and an irregular, tender, doughy mass behind it and on its left. Operation was advised, and on opening the peritoneal cavity free blood clot was found. The tube was removed, as there had evidently been a tubal abortion.

Pathological report: "There is great distension of the ampullary part of the tube, increasing outwards: the length is four inches and the greatest diameter is $1\frac{3}{4}$ inches. Fimbriæ are not seen, and the outer end of the tube is a rounded tumour from which blood clot can be peeled. When a thin slice is taken off the distended portion of the tube, parallel with its long axis, a gestation sac is opened, which has a small diverticulum extending towards the lumen of the tube. The placenta is in the slice removed: the fœtus is 18 mm. long, and is apparently seven to eight weeks old. Surrounding the sac is blood clot in which are chorionic villi."

When a woman whose menstruation is regular has a period of amenorrhœa for two or three months along with other signs of pregnancy, and is suddenly seized by severe cramp-like pelvic pains, and when, more especially, a doughy mass is felt on one side of the uterine body, tubal pregnancy should always be suspected.

2. Mrs. B., 29, 3-para, the last child $2\frac{1}{2}$ years old. Forceps had been used at that time, and "inflammation of the womb" had followed. Since then there had been occasional pain in the left side. Menstruation had also been irregular, and before the present flow started it had been away for six weeks. At the end of that time there were retching, headache, abdominal pain, especially in the left side, and bleeding. For a fortnight rest in bed under medical supervision was taken. Defæcation increased the pain.

On examination I felt a mass over the left lower quadrant of the abdomen and filling up the left vaginal fornix, firm, dense, immovable, fixed to the uterus.

The history and the result of the examination decided my diagnosis of extra-uterine pregnancy. At the operation the large mass was found to be composed of intestine, adherent omentum, blood clot, and gestation sac. The clot extended into the pouch of Douglas behind, and to the left of the middle line in front. The left tube was removed, and the tissues forming the boundaries of the sac were brought together by catgut sutures.

Microscopically there were chorionic villi in the tubal clot. The tube had at one point a fusiform dilatation.

In this case there had been no suspicion of the presence of extra-uterine pregnancy. The amenorrhœa for three weeks after the period was due—although the irregularity tended to make this sign less trustworthy than usual—the pain, and the bleeding should all have roused suspicion which ought to have been developed into practical certainty by careful examination.

3. Mrs. C., 22, was delivered of her first child a little more than four months before I saw her. On the sixth day after the birth the temperature rose to 102°, on the next, with a rigor, to 106°. An attack of marked puerperal sepsis was passed through. She was sent to me in four months because she had never felt well since her confinement. She had had pain in her left side, a bearing-down feeling, and a more or less constant red discharge. There had not been any amenorrhœa nor any very acute attack of pain. Examination revealed a tender, firm mass to the left of the uterus, and it appeared fairly evident that this was an enlarged matted tube and ovary, the result of the puerperal sepsis. As the patient was a good deal worn out by the aching pain, and had never regained strength after the birth, it was deemed that the most satisfactory treatment was to remove the tube and ovary.

At the operation, blood clot was found in the peritoneal cavity. The left tube contained clot, and was removed. The right appendages were normal.

Later examination of the specimen showed that the ampullary part of the tube was greatly thickened, a mass of blood clot adhering to it, to the mesosalpinx, and to the ovary. In the midst of this clot was the mucous membrane of the tube. Decidual cells and chorionic villi were found in the distended portion of the tube and in the clot in its interior.

A more misleading case can scarcely be imagined. The post-puerperal sepsis so comparatively shortly before, and the probability that an inflammatory mass of matted tube, ovary, and exudate had been left as a result, seemed to point clearly to the existence of a subacute inflammatory condition. The patient had never been well, had been confined to bed off and on ever since, and it seemed almost impossible that pregnancy of any kind had occurred. There had never been any amenorrhœa. The more or less constant bleedings and the colicky pains were somewhat puzzling symptoms, and made the diagnosis uncertain. The case is another warning of the need always to bear in mind the possibility of extra-uterine pregnancy under even the most unlikely circumstances.

4. Mrs. D., 29, had been married four months before I saw her, and was a nullipara. Menstruation came a few days after marriage, then again, normally, a month later. Three weeks after this, two months before the patient was seen by me, sharp, cutting pains were felt for about two hours, and then bleeding began. A week afterwards there was burning pain in the abdomen. She was put to bed where she had been ever since. The pain gradually ceased, but bleeding had continued. Clots had occasionally been passed. She was tired and felt run-down.

Such was the history, in brief, and on examining, the cervix was felt short, softened, directed forwards; the uterus increased in size, slightly retroverted, its mobility impaired in all directions. The right fornix was occupied by a doughy mass of indefinite outline, and the left by a cystic swelling.

In the evening before operation, a sharp pain was felt in the left iliac region for about 20 minutes, and increased fulness was afterwards felt in the fornices. The temperature was 97.6° and the pulse 68, small in volume.

At operation, blood, free and clotted, was found in the peritoneal cavity. There were some adhesions of intestines in the pelvis. The left ovary was cystic, the size of a tangerine orange; part was removed On the right side was a tubal pregnancy: the tube and part of the ovary were taken away.

Later, the right tube was found much distended in its outer aspect; the diameter 1¼ in. The posterior wall of the tube, the mesosalpinx and the ovary were covered with clot. The distended tube contained blood clot, in which were chorionic villi. The cyst of the left ovary was about the size of a tennis ball, and there were two loculi.

Here, again, there were conditions liable to mislead. The nulliparity, the marriage so shortly before, the absence of amenorrhœa, morning sickness, or any other symptoms of pregnancy, all combined to lead astray the medical adviser.

But the continuous bleeding, the sudden attacks of sharp pain, and the doughy mass felt in the position of the tube should have aroused suspicion. Earlier operation would then have been performed, with consequent saving of pain and invalidism, as well as the avoidance of potential serious dangers, immediate or distant.

5. Mrs. E., 29, 1-para, the child being 16 months old. Menstruation usually lasted seven days, and was profuse, but otherwise normal. The last menstruation was eight days before I saw the patient, and had come at its proper time. There had been no amenorrhœa. Shortly before the period began there were intermittent pains in the left iliac region, with vomiting, dysuria and constipation. Later on the menstrual discharge was as usual, and was not prolonged. She was in bed for a fortnight before she was seen by me, and at the end of that time she had pretty acute abdominal pain and distension. The pulse was quick (120) and the temperature 99°. Purgation and high enemata greatly improved the condition, and the abdominal measurement decreased by an inch. Treatment on these lines was carried out for a week before operation.

The vaginal examination showed the uterus to be in normal position in front, but dextroposed. The left fornix was filled with a firm elastic swelling, extending upwards to the level of the anterior superior spinous process, and filling up the pouch of Douglas.

At the operation the peritoneum was found injected and the omentum adherent. The peritoneal cavity contained much blood clot. The left tube was greatly dilated, and had ruptured. It was removed. On the right side the adnexa were freed and adhesions separated.

Pathological report: "The tube forms an elastic swelling, the greatest diameter of which is 3 inches by 1½ inches. On section the contents are solid clot in which are pale areas which, microscopically, show chorionic villi and decidua-like cells."

The chief difficulty in making a diagnosis here was due to the fact that menstruation had been normal and regular. This is not easy to explain in this particular case unless on the supposition that impregnation had occurred after the period before the last, and that what had seemed to be a normal period at the right time was really bleeding in connection with the rupture of the tube. The symptoms were much aggravated by severe constipation and intestinal distension by flatus.

6. Mrs. F., 39, 8-para., last child two years of age. Menstruation, always regular and normal, occurred as usual, and the last period was at the right date. Ten days after it ceased the patient was seized with sharp, cutting pains in the lower abdomen, on both sides, and in the region of the rectum. Some hours afterwards hæmorrhage began and was continuous until the operation, three weeks later. During this time there was much blood lost; weakness and giddiness were present on exertion; pain in the left iliac, sacral and lumbar regions was felt, intermittent and cramp-like and aggravated by stooping or walking.

The uterus was found in normal position; an irregular, tender swelling lay on its right side, though not quite in contact with it. The right adnexa were normal.

At the operation dark blood welled up. A very large clot, filling up the back and left part of the lower abdomen, was removed piecemeal, adhesions between tube and bowel being thus revealed. The gestation sac, with left tube and ovary, was removed.

Later examination of the specimen showed a fusiform swelling of the ampulla (2 inches by 1 inch); clot protruded at the ostium, and the tube contained clot in which chorionic villi were present.

This, again, as will be seen, was an atypical case, so far as the history was concerned.

7. Mrs. G., 40, 3-para, last child six years old. Menstruation was normal and regular. Six weeks, however, had passed without any appearance, and some sickness began to be felt. One evening, when the patient was walking out of doors, a sharp pain was felt, and almost immediately afterwards bleeding came on. After home was reached alarming collapse set in, and I saw the patient with her medical adviser after midnight. Although the pulse was rapid and weak, it was apparent to those around her that by this time rallying had taken place to some extent. Dulness was obtained in the flanks, and by the vagina fulness could be felt in the pouch of Douglas. As the patient lived in the country, it was decided to leave her in absolute rest, without even changing her clothes, and to remove her in an ambulance in the morning to a nursing home in town. This was done, and on operation a typically ruptured tube was removed, along with much blood, from the peritoneal cavity.

The chief features of this case were the suddenness of the onset of acute symptoms in such an unlooked-for fashion and the amount of blood lost, the patient being only a fortnight beyond her expected time for menstruation.

With the exception of this last case, not one of the series was diagnosed by the practitioner in attendance, and it must be confessed that in the second I was unprepared for the result of the abdominal section. The last was by far the most typical in every respect, and as it was one in which, not an abortion, but a rupture of the tube took place, the symptoms were extremely severe, the shock and pallor being specially well marked. There was, therefore, not much doubt as to the diagnosis.

Seven cases are too few to allow of any deductions being formed. They, however, at least, bring out this fact very clearly—that we cannot base a diagnosis of extra-uterine pregnancy upon any one sign or symptom or upon the history. Still, it may be instructive to analyse them in detail, however briefly, in search of possible aids to the elucidation of our future cases.

1. As regards the age of the women, this varied between 23 and 40, so that we cannot depend much upon this point. But it is noteworthy that three were 29 years of age, and it has been noted by others that extra-uterine pregnancy is specially liable to occur in a woman of 28 or 29. In that respect, therefore, these seven cases are characteristic in showing the extremes between which the condition may happen and the special predilection for the year or two below 30.

2. Previous pregnancies.—Only one woman had borne a large family—eight children. One had not been pregnant before, and two had had only one child. We can lay no stress in diagnosing the condition upon the number of previous pregnancies, and we must recognise that even during the first few months of married life there may be an abnormal pregnancy.

3. Cessation of menstruation.—In no fewer than four of the women there had been no amenorrhœa, and we must therefore always remember that we are not justified in declaring that because menstruation has been perfectly regular there cannot possibly be extra-uterine pregnancy.

4. Pain was a feature common to all of the seven cases, and it is practically always a prominent and characteristic symptom of ectopic pregnancies after rupture or abortion. The pain is situated in the lower part of the abdomen; usually it is unilateral, often recurrent, generally very severe, and as a rule it is sudden in onset. Each of these qualities of the pain should be carefully held in our remembrance, because, taken together, they provide the most trustworthy symptomatic evidences of the existence of extra-uterine pregnancy at the stage when first seen by the practitioner.

5. As a rule, in addition to the pain there is a second significant guide to correct diagnosis—hæmorrhage from the uterus. This occurred in six out of our seven cases simultaneously with, or shortly after, the initial pain. The amount was never very serious, but the most arresting feature of the bleeding, one which should always arouse our suspicions, was that the accompanying faintness and pallor were out of all proportion to the quantity of blood lost per vaginam. In these cases this is due, of course, to the concealed intra-tubal or intra-peritoneal hæmorrhage going on at the same time.

6. The physical signs were in our cases those usually found. In the last, which was very acute and due to total rupture, and which I saw within a few hours of its occurrence, the abdomen was somewhat distended and there was dulness over the flanks, but very little could be made out per vaginam. In the remaining six the uterus felt enlarged, and a mass, ill-defined and doughy, occupied the site of a tube, and in three of these the pouch of Douglas was also the site of a swelling.

Undoubtedly there are very puzzling cases of ectopic pregnancy, and no better example of one could be given than the second in our series. For our encouragement it can be confidently asserted that no man, however experienced, could have made a positive diagnosis. Fortunately, however, the course of treatment was very evident and plain, whether the case was one of extra-uterine pregnancy or of an inflammatory or suppurative condition of the tube and ovary, and it effected a cure—as it always would do under similar circumstances.

An ordinary uterine miscarriage should usually be easily distinguished from a tubal rupture or abortion. The pain in the former ceases after expulsion of the ovum, and is felt in the back or hypogastrium; while in the latter it is generally unilateral, in front, recurrent, and much more severe. There is only the enlarged uterus to be felt in the former; but in the latter there is, in addition, a swelling at one side. These are the chief points of differentiation.

It is at all times our duty to diagnose the presence of extra-uterine pregnancy at as early a date as possible, and that for several reasons. (1) Because women have bled to death in acute rupture with huge intra-peritoneal hæmorrhage, and the good general surgical principle, that bleeding ought always to be arrested as quickly as possible, should be followed. This class of case is, however, usually so characteristic and dramatic as to present few difficulties in diagnosis, and nowadays is, as a rule, treated early. (2) Because we ought not to leave the future to chance when we are dealing with cases less severe though similar in nature with those last mentioned, since we never can tell at what moment a serious secondary bleeding may occur. (3) Because in milder cases of tubal abortion with hæmatoceles adhesions may follow later and cause pain, the sac may enlarge from further bleedings, suppuration in the clot may occur and result in sepsis.

It is impossible for anyone to foretell what may happen, and, therefore, whether for the sake of safety to life or for the prevention of weeks, or even months, of invalidism, an early diagnosis, followed by early treatment, is most emphatically necessary in all cases similar to those recorded in this paper.

THE INGLEBY LECTURE
ON
PUERPERAL FEVER. (*a*)

By J. FURNEAUX JORDAN, B.Ch., F.R.C.S.,

Surgeon to the Birmingham Hospital for Women, and the Maternity Hospital.

(Concluded from page 13.*)*

(4) Mrs. C., æt. 26. First confinement. Patient generally septic. Confined on April 16th, 1911, attended by a midwife, who, as the labour proved difficult, called in Dr. Norton, and with great difficulty she was delivered with forceps. She remained for six days quite well, but on the seventh day she felt ill, hot and feverish, and on the eighth day she had a rigor and remained in a condition of fever, with several rigors occurring, until admitted on April 28th, that is the thirteenth day after confinement. On admission temperature was 103, abdomen tender, uterus tender, with some thickening around it. Patient was nursed, bowels were kept open, and her temperature coming down gradually the first few days I hoped that the induration around the uterus and the cellulitis would absorb of itself, but in the next six days her temperature went gradually up again to 103.5. I operated on May 9th, making an incision into the cellulitic deposit per vaginam, opening two small collections of pus and draining them. The uterus was explored, and swabs taken for culture and possibly vaccine preparation. For the next 6½ weeks her temperature was up every evening and down every morning, up to anything between 99.5 and 102, and down in the morning to normal, sometimes subnormal. The cultures showed pure streptococcus. She had vaccines every fourth day, but they seemed to have no effect upon the fever. The patient's general condition improved a little at first, and then remained stationary; all this time she expressed herself as feeling well and free from pain though so weak that she could not sit up in bed. In the seventh week the rise of temperature at night becoming higher, I made more frequent examinations, and on the forty-sixth day I opened another small abscess behind the uterus. The temperature fell after this, but there was still some evening rise, but gradually she became nearer and nearer to normal, and in another three weeks she was put to sleep out of doors in the garden. For seven more weeks she lay there looking better, feeling better, her temperature up to 99 sometimes at night but normal in the morning, but so weak still that it was impossible for her to get up, and in spite of her feeling and looking better there was no gain in weight, she having become, and remaining, extremely emaciated. About the middle of August her temperature rose again three or four times in a week to over 101, and as I was away on my holiday, Mr. Hewetson saw her for me, and found some induration in the right groin. He opened this, letting out some pus, on August 24th. Her temperature at once became normal, and remained so for the five more weeks that she remained in hospital. Her recovery after this was steady, but extremely slow, and even when she left the hospital she was a thin, pale, anxious-looking woman. I saw

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(*a*) Delivered at the Birmingham University on May 23rd, 1912.

her a month ago looking and feeling very well. Duration of stay in hospital five months.

(5) Mrs. L., æt. 32. Six children. Prematurely confined on February 16th, 1911, attended by a neighbour. On the third day was taken ill with shivers, and getting worse, Dr. Petrie was sent for on February 22nd, and I saw her with him on the 23rd. Patient was wandering, and in a state of acute sepsis; temperature 103.6; sordes on the lips; dry furred tongue; abdomen tender, but not distended; pulse over 140. At the time I did not expect her to live 24 hours, and hesitated about moving her to the hospital for fear that she should die on the way. She had two more rigors in the first 24 hours after admission, and an injection of anti-streptococcic serum was given, while intra-uterine swabs were taken for the purpose of examination, and preparation of vaccine. On the third day after admission she had six minims of her own vaccine (30 million), and subsequently she had an injection of vaccine every third or fourth day for the next fortnight; but as the rigors persisted and her temperature rose most days to 104 or 105 and sometimes to 106, the vaccine treatment was stopped. The cultures made from swabs showed pure streptococci. In the third week she had a rigor every day, her temperature on two occasions going off the chart up to 108.4. On two other occasions it was up to 106 and 108 respectively. After the vaccine treatment was suspended, blood cultures were made, and proved to be sterile. The patient was never completely conscious, and her death was expected every day, but in the fourth week she improved a very little, she only had three rigors, and for 2½ days her temperature was normal. The fifth week had two rigors, but her temperature on the whole higher, rising on four occasions above 102, and the patient became more and more prostrate. At the end of the sixth week she began to cough and her breathing was more laboured. An examination of the chest revealed no definite pneumonia, no definite area of dulness, moist breath sounds. The condition of the lungs did not get any worse, but the patient gradually got weaker and weaker, and died on April 7th.

Post-mortem.—Body well developed; very anæmic. Abdomen: No peritonitis, though there are some shaggy tags on the cæcum and lower end of ileum, as if there had long ago been some local peritonitis; uterus, etc., free and apparently normal; no pelvic cellulitis nor phlebitis. In the interior of the uterus a small projection like the top of a small mushroom from the centre of the fundus covered with a yellow purulent exudate; liver large, normal colour, no abscesses; kidneys large, pale, subacute parenchymatous nephritis; spleen enlarged. Thorax: No pleural effusion and no adhesions, some yellow lymph on both lungs, lungs infiltrated throughout with nodules as large as small marbles; most of these on section are abscesses and full of dirty pus, some of them are reddish and solid, evidently a septic broncho-pneumonia showing infected area in various stages. The lung between the nodules is singularly unaffected and practically normal; there is no pus in the bronchi, and none of the abscesses appear to actually communicate with a bronchus. Pericardium contains 4 ounces of serum; heart is flabby, no valvular disease.

Microscope.—The mass at the top of the uterus is placenta undergoing organisation, shows no evidence of acute inflammation and contains no microorganisms. The pus from the lung abscesses is crowded with germs of all sorts, and of types usually found in the air passages, so that although the primary lung infection was probably a metastasis, the majority of the abscesses owe their origin to a dissemination by the smaller tubes, and the contact of the air has allowed the infection to become mixed. There are streptococci and Gram-positive diplococci, Gram-negative diplococci like M. catarrhalis, and short and long Gram-positive diphtheroid germs of all sorts.

From a consideration of these and somewhat similar cases we learn that even when the temperature has come down to normal, the tongue has cleaned, and all abdominal pain and tenderness have disappeared, unless also the patient gains steadily in strength, puts on weight, and is able to get up, the most careful and continuous care must be taken that any surgical condition—as, for example, an abscess—will not be overlooked, for in these cases the abscess will form a swelling free from pain, free from tenderness, and free from redness. We learn that on the slightest complaint of any trouble with respiration or pain in the chest, or with any cough, a careful examination of the chest must be made. We learn that the abscess tends to form in a dependent part of the body, and I think I may add that we learn also that when these surgical conditions supervene during the time that the patient is under vaccine treatment, they are never acute, and if open to surgical treatment are easily cured.

Causation.

It is usually the custom to deal with the ætiology of a disease at an early stage of a lecture or paper. My excuse for leaving it till now is that I always share in the feelings of a little boy who has a jam tart and who eats all the circular rim of dry paste first and leaves the jammy centre for the last mouthful. I do not mean to imply that I am going to give you anything very different from the circular rim, but merely something that is, I think, a little less dry.

When we think of the usual surroundings of the new-born babe we ought to be surprised not that there is so much puerperal fever, but that there is not a good deal more. In direct contact with the patient, in direct contact with the doctor's or midwife's hands, in direct contact with any tear or wound that may be inflicted are, in most of the working-class houses, blankets, or sheets, or clothes that even if not describable as dirty, cannot by any stretch of the imagination be called surgically clean. It is surely legitimate to ask why sterilised towels should be placed all round the field of an operation and not around the field of a delivery; the latter being even more exposed to the risk of infection than the former. We take infinite pains to keep from an operation wound staphylococcus, bacillus coli, streptococcus pyogenes, etc. Do we, can we honestly say that we do invariably take the same pains to keep them from a cervical or perineal tear in a confinement? The doctor in attendance will invariably tell you that he thoroughly sterilised his hands, that his forceps were boiled, also any sutures and needles that he used; but is there as much attention paid to cleansing the patient as there is to cleansing the doctor's hands? I think it may truly be said that there is not, and, as I shall show you in a few minutes, it is here that the danger lies. Before a difficult forceps case is finished the hands of the attendant must frequently come into contact with the thighs, vulva, and abdomen of the patient, and although they may be thoroughly sterilised to start with, it is incredible that they remain so to the very end. If we hold the view that puerperal fever is only taken to a case from a previous one, that the causative germ comes into the room on the attendant's hands or instruments, and is not present on or in the patient, then the ordinary method of procedure would be sufficient; but let us examine this causative germ for a few minutes. I give here the results of the bacteriological examination of the uterine discharge as shown in cultures or cultures and films in 21 cases of puerperal fever—nearly all of which have been under my own care.

(1) Pure bacillus coli in cultures and films.

(2) Cultures showed pure streptococcus and a few colonies of staphylococcus aureus, sputum crowded with streptococci.

(3) Streptococcus and diphtheroid bacillus.

(4, 5 and 6) Pure growth of streptococcus in cultures.

(7) Cultures showed streptococci and bacillus coli mixed.

(8) Profuse and pure culture of staphylococcus albus.

(9) Cultures showed staphylococcus aureus. Some doubt as to this causing puerperal rise of temperature; three days later pus evacuated from Douglas's pouch, cultures from the pus showed streptococcus and bacillus coli. (This was a case of Mr. Martin's.)

(10) Cultures showed streptococcus and diphtheroid bacillus, bacillus coli and staphylococcus albus. The

swabs were probably contaminated from the vagina. (This was a case of Dr. Edge's that died on the fourth day of peritonitis.)

(12) Pure growth of streptococcus in cultures.

(13) Pure growth of streptococcus in cultures, also from the pus of a secondary abscess.

(14) Cultures showed profuse bacillus coli and few streptococci.

(15) Pure growth of streptococcus in cultures.

(16) Pure growth of streptococcus in cultures, also from the fluid taken from the pleura.

(17) A fine colony of streptococci, but not same as the streptococci in the other puerperal cases.

(18) Few bacillus coli, but chiefly a Gram-negative bacillus in tiny colonies.

(19, 20 and 21) Pure growth of streptococcus in cultures.

Dr. Mackey, who has done all the bacteriological investigations, tells me that the streptococcus which is present in 17 of the 21 cases is quite distinct from other streptococci, is the same identically in all these 17 and that in any secondary pus, pleuritic fluid or sputum, it was identical with that found in the uterine discharge. He also tells me that he has never found it in any other septic cases, and only once has he seen it apart from these puerperal cases, and that was in the cerebro-spinal fluid of a chorea gravidarum.

We suggest that it might be called the streptococcus puerperalis.

Its characters are as follows:—It grows freely upon agar, producing opaque colonies which are much larger than any other streptococci, so much so that after 48 hours the colonies might easily be mistaken for those of staphylococcus albus; in both it produces chains of moderate length which have little tendency to form clumps or entanglements. Its fermentation tests are as follows:—It produces acid and clot in milk, acid in lactose, in glucose, saccharose and salicin, no change in raffinose, mannite and inulin. These reactions show that it differs from the streptococcus fæcalis in its action to mannite, and from the streptococcus pyogenes by its production of clot in milk. Since this definite streptococcus has been found on bacteriological examination in the uterine discharge in 17 out of 21 cases—that is, in 80 per cent. of the cases—we have a *prima facie* right in assuming that this is the most frequent cause of puerperal fever. It must not, at the same time, be forgotten that cases have been shown to be due to infection by bacillus coli, staphylococcus aureus, and other kinds of streptococci. Since this streptococcus puerperalis is found nowhere practically but in these puerperal cases, it would be foolish to think that doctors or midwives convey the infection to the patient, it would be still more foolish to think that the infection cannot be conveyed from one patient to another. This sounds paradoxical, but it is well known to you that puerperal fever does and will occur in isolated cases. A doctor will for a long time be free from a case, then he gets one, and possibly after another very long interval he will get another. If one follow the other closely, if while attending the first the second were infected, it is possible that he might have conveyed the infection from one to the other, but in isolated cases where does the infection come from? A simple explanation, and one that requires, and will get, for its proof or otherwise, further investigation, is that this streptococcus, like the streptococcus fæcalis, is present in the contents of the bowel, and that the puerperal woman is very susceptible to its action. Efforts will be made to discover and isolate this germ from the fæces. Its presence in the bowel will explain everything, including those cases in which, in spite of many precautions, fever occurs.

You will remember that in three of the cases reported it was associated with bacillus coli, and it is not difficult, therefore, to understand how easily the puerperal uterus becomes infected from the rectum. Even the separating bridge of the perineum may be absent at the end of a confinement, so that the passage of the streptococcus from the rectum to the uterus is actually facilitated. That perineal and rectal operations are not followed by infection by this streptococcus we may look upon as due to the fact that all such operation wounds, when there is a possibility of discharge collecting, are drained.

Now it is obvious to everyone that after the confinement is over the cavity of the uterus, if there is the slightest fault in involution, will remain as an inert bag containing more or less blood clot and serum. Here we have a ready soil in which these streptococci can multiply, a soil, too, that is in direct contact with a surface immediately ready for absorption. This explanation, then, although not fully proved, explains both the occasional sporadic nature of the case and also the facility with which one puerperal case will infect another.

TREATMENT.

(1) *Preventive.*—There can be little doubt in the minds of any of you as to the lines that should be followed in order to keep your patients free from puerperal fever.

It may be recalled that the streptococcus puerperalis was associated three times with the bacillus coli, the bacillus coli was found alone in one case, a profuse growth of bacillus coli with a few streptococci occurred in another, the staphylococcus aureus in yet another, and lastly a fine colony of streptococci unlike the streptococcus puerperalis in another. Bearing these facts in mind, and also the theory that the streptococcus puerperalis is present in the bowel, it will be recognised by all that absolute surgical cleanliness not only of hands and of instruments is essential, but equally essential is the absolute surgical cleanliness of the patient's skin. The whole area of the field of delivery should be thoroughly cleaned—The thighs, the vulva, and the abdomen; the hair should be clipped quite short, and if any obstetric operation has to be performed I think it would be better to shave it off.

Since at the beginning of labour an enema is given to ensure as far as possible that the rectum shall be empty during the delivery of the baby, it follows that the neighbourhood of the anus has recently been infected by contact with the contents of the bowel. It is our especial duty to pay greater attention than we have done to cleansing the region of the anus. However well the rectum is emptied it usually happens that more or less of the bowel contents are expelled in the last part of the second stage of labour. It is wise to have a bowl of solution of biniodide of mercury (1 in 1,000) close at hand with some biggish pieces of absorbent wool in it, and as any fæcal matter escapes wipe it away thoroughly from front to back with the solution; thus will any possible infection be carried away from the vaginal opening. Care should be taken not to soil one's fingers in doing so—to be successful in this the pieces of wool should be of large size. Always wear a sterilised gown, and take three or four sterilised towels to place under the patient and over the edges of the turned-up patient's clothes and turned-down bedclothes. If there is a nurse in charge beforehand, she can prepare the sterilised towels before the stage of labour at which they will be required is reached. We must cleanse our hands before we start cleansing the patient, and after cleaning the patient we must clean our own hands again, and then put on the gown and place our towels ready in position. Some of you will at this stage put on rubber gloves that have been boiled, others will not. If a man has absolute faith in the power he has of sterilising his hands he may or may not wear gloves; if he has not this faith, then the wearing of gloves or not will make no difference; for in midwifery work, above all other, it frequently happens that a hole may be torn in the glove and unless the hand inside it is absolutely sterile the glove will have been useless.

To my mind, the great advantage of rubber gloves in surgical work is that you can by their means protect your hands from sources of infection. The method that will be used for cleansing the skin of the patient you must decide for yourselves. Personally, I am a great believer in thorough scrubbing with a sterilised loofah with soap and hot water followed by vigorous rubbing with a dry sterilised towel, then a thorough rubbing with methylated spirits, to be followed finally by rubbing with a solution of biniodide of mercury (1 in 500) in 75 per cent. of methylated spirits.

I think I am right in saying that Mr. Leedham Green's experiments on sterilising of the hands have shown that this method gives the best results.

After what I have told you, is there anything else that we can think of that will help in the prevention of puerperal fever?

I do not think it is a dream impossible of fulfilment that every woman at the commencement of labour shall have an injection of the vaccine of a streptococcus puerperalis, thus rendering her immune beforehand to the infection by this germ. This, at any rate, would render her immune in 70 or 80 per cent. of the cases.

Further consideration even might lead an enthusiast to inject also a vaccine prepared from the bacillus coli.

It may be said that this elaborate method of cleansing—sterilised gowns and towels, rubber gloves, and even more, stock vaccines, will involve such an expense that the extremely moderate fee that is received by the practitioner for attending a woman at the most critical period of her life is insufficient to justify one in incurring it. Surely the occurrence of one case of puerperal fever will involve such an expenditure of brain power and of time that this very moderate expenditure in every case is to my mind not only justified but essential. I speak now of the expenditure on the methods of sterilisation and not of the expenditure on stock vaccines. As I have already hinted, this preliminary injection of stock vaccines may be only a dream of mine which may, or may not, be fulfilled.

Before we leave the question of preventive treatment I may add, although it is hardly necessary to do so, the importance of impressing upon the patient beforehand the importance of a clean, well-aired room, of clean blankets and clean sheets. If possible, too, the patient should have a good warm bath before labour begins or as it begins.

(2) *Treatment of the fever when the temperature rises.*—When the first rise of temperature is in the first 48 hours and is only a slight one, up to or just over 100, when there is no great rise in the pulse-rate and the patient does not feel very ill, the best thing to do is to wash out the uterus with an antiseptic solution, seeing to it carefully that all the apparatus used is scrupulously clean. In many cases the temperature will fall the next morning and never rise again. If the rise in temperature over 100 persists over two days, or occurs a second time, we must conclude that there is fever more or less severe.

It would be a very good thing if every case of puerperal fever were immediately notified to the Medical Officer of Health, and then institutional treatment will be available for those who cannot possibly afford suitable treatment at home. The majority of these latter will probably be the midwives cases to which, when the temperature rises, the doctor has been called in Those who can afford suitable treatment can be immediately treated at home, but immediate notification means immediate treatment for those who cannot so afford it. The number of cases at present notified to the M.O.H. in this city is only a small proportion of the cases that occur. You would hardly believe it when I say that the number notified to the M.O.H. is actually less than the number admitted to the ward at Sparkhill.

For any treatment to have a chance of success it must be started early in the disease. What I would advise is this:—That the patient be placed on her left side with the knees drawn up, that the doctor, wearing sterilised rubber gloves to protect his own hands from infection, should pass a duck-bill speculum and swab out the vagina with a mild antiseptic solution by bits of wool held in a vulsellum forceps. Having done this, he should catch hold of the anterior lip of the cervix with the vulsellum forceps and pull the uterus a little downwards and forwards so as to expose the external os; a second person will, of course, hold the speculum, and then the doctor holding the forceps in the right hand will take a sterilised swab such as shown here, and taking care that it does not touch any of the parts on the way, will push it through the os into the interior of the uterus, will draw it out with equal care, and immediately cork it tightly in a sterilised test-tube. By bacteriological examination of this swab he has a certain means of ascertaining the nature of the infection. He should then by manual examination try to satisfy himself that the interior of the uterus is clear of any retained placenta or membranes. If there is any doubt of this, holding the cervix as before in the vulsellum forceps, he can pass a blunt curette into the uterus and run it over the whole of the inner surface of the uterus, then swab out the interior with a piece of wool, either on a wooden probe or held on long forceps and dipped in the dilute solution of biniodide of mercury, and finally insert into the uterus a strip of iodoform gauze to act as a drain. Following on this I think it would be advisable to give the patient an injection of vaccine containing 25 or 30 million of the streptococcus puerperalis.

I may say here that I do not doubt that very shortly stock vaccines will be prepared from this streptococcus, and will be placed on the market.

Believing as I do in the efficacy of a vaccine prepared from the source of the patient's infection—what I may call the patient's own vaccine—I would advise that, whenever the patient can afford it, you have one prepared, and as soon as possible give her an injection of it.

The question of expense must enter into this treatment. The preparation of vaccine involves several hours' work, and can only be done with absolute safety either by or under the immediate supervision of a skilled bacteriologist. You will be the first to admit that such services must be paid for.

I think I may claim from some of the results in the treatment by this method that I have given you that I am justified in asking you to adopt this treatment. I quoted three severe cases where this treatment was applied early with complete success, and even in those prolonged, drawn-out cases in which the vaccine did not appear to have an immediate curative effect, I would point out that, when what I called a surgical condition—such as the formation of an abscess—appeared, it was only accompanied by a slight irregular temperature, by no fresh general septic condition of the patient, and after the abscess was opened the recovery was immediate and complete; whereas, in cases which did not have the vaccine treatment, any fresh surgical condition was accompanied by an increase in the general septic condition of the patient, leading ultimately to a fatal end.

I do not claim for one minute that if the patient has been profoundly infected by the toxins of these streptococci, and if the infection has been prolonged for some time, it is possible to bring about immunity and recovery by the injection of vaccines; but what I do ask that we should all aim at is, that the patient should be given a chance of becoming immune to the infection before her powers of resistance have been too far overcome by the degree and the duration of the infection.

I would like to add here one or two other examples of treatment by this method. Let me give you a case that has come under my care after most of this lecture was written:—

Mrs. J., æt. 25; confined April 8th; normal confinement; primipara.

Had a rigor April 9th; temperature 104.2. Admitted to the hospital on April 11th. On admission in the night I was rung up by the matron, who told me that the patient was so ill that she did not think she would live till the morning. I ordered stock vaccine, 30 million of the streptococcus puerperalis. When I saw her the next morning her temperature had begun to go down; she was delirious, trying to get out of bed, picking at the bedclothes, dry and almost black tongue, sordes on her lips, pulse that I could hardly count and very feeble, uterus big and tender, abdomen slightly distended and tender, no tear in the perineum. I took swabs of the interior of the uterus. Dr. Mackey reported an infection of a streptococcus puerperalis and bacillus coli. During that day her temperature fell to 101, but went up again the next day to 104.8, and she had two rigors. Her temperature remained up until the third day after admission, when she had a dose of her own vaccine—4 minims, containing 20 million streptococci and 100 million bacillus coli. Her temperature came down rapidly to normal, and has never risen again, although it was some days before she became quite clear in her mind, and before her tongue became clean and moist; she had a second dose of her own vaccine four days later of 25 million streptococci and 120 million bacillus coli. Her temperature remained normal, but on May 5th I noticed a small swelling at the back of the right buttock. The next day I found that this was larger and fluctuating, and under a local anæsthetic I opened it and let out about 1oz. of pus, there being no rise of temperature; and by this time the patient, who had had altogether four doses of her own vaccine, was expressing herself as feeling very well and anxious to get up. Under ordinary circumstances I would certainly have said, when I first saw her, that this patient had not a chance of recovery.

Showing the advantage of treatment by the patient's own vaccine as compared with stock vaccine, there is the case of

Mrs. T., æt. 36; confined by a midwife; fairly profuse post-partum hæmorrhage; on second, third, and fourth days had rigors; on the fifth she was seen by Dr. Barber and by myself; temperature 103.6; in acute septic condition. Admitted to the hospital the next day, and the usual treatment was followed out. Dr. Mackey's report showed that infection was due to bacillus coli, but chiefly to a Gram-negative bacillus in tiny colonies smaller than the streptococcic colonies, which I think I am right in saying that Dr. Mackey said he had never seen before. Her temperature was irregular for the first nine days after admission, but usually varying from 101 to 103. After the second dose of her own vaccine on the ninth day, containing 60 million bacillus coli and 15 million of the other bacillus, her temperature came down steadily, and, although it subsequently rose twice to 101, her recovery was continuous and complete.

A second case, also showing the advantage of her own vaccine, was that of Mrs. P., who was admitted on the fourteenth day after her confinement with all the symptoms of puerperal fever. Cultures showed streptococcus and a few colonies of staphylococcus aureus. On admission she had a bad cough, there were crepitations behind the left apex, and the sputum was crowded with the same streptococci. She had one dose of her own vaccine, containing 20 million streptococci and 200 million staphylococci; her temperature came down to normal and never rose again.

In addition to this treatment by vaccines, none of the ordinary methods of treatment should, if indicated, be neglected:—Intra-uterine douching with dilute antiseptics, iodoform pencils in the vagina if the discharge is offensive, tonics, careful attention to the bowels, and, when necessary, stimulants.

I have now come to the end of my lecture. I chose the subject, as I told you, because I thought it was one of interest to the majority of medical men. I may say now that I chose it also because I was anxious to impress upon you the possible advantage that your patients may derive from your knowledge of this vaccine treatment. I may have formed my conclusions too hastily, and you may say that they are not warranted by the number of cases investigated. I can only say now that I am going on with these investigations, and further results will be published when they are ready. I chose this subject, too, because it has always seemed to me that the death of a woman in childbirth from puerperal fever is a matter of reproach to the medical profession, and any possible advantage in treatment that may be derived from investigations into all aspects of the disease should be—and will be, I am sure—heartily welcomed by the profession.

No one is more conscious than I am of the inadequacies of my lecture, and any little merit that there may be in it I owe almost entirely to our bacteriologist, Dr. Mackey. To him I give my deepest thanks. I have also to thank—and I do it with pleasure—my colleagues on the staffs of the Women's and Maternity Hospitals; and, finally, gentlemen, I thank you for your attendance here this afternoon.

OPERATING THEATRES.

HAMPSTEAD AND NORTH-WEST LONDON HOSPITAL.

CARCINOMA OF THE CERVIX UTERI.—MR. JACKSON CLARKE operated on a woman, æt. 60, who had been admitted for recurrent metrorrhagia during the previous twelve months. The general condition of the patient was satisfactory. On vaginal examination, the external os was found to be irregular and nodular, and the entire cervix was hard and slightly enlarged. The fornices were carefully palpated, but no evidence of extension of the disease into them was found. There had been no symptoms pointing to implication of either the bladder or the rectum, nor was any evidence of such extension detected during the examination.

At the operation, the vagina having been well douched out with dilute lysol solution, the interior of the cervix was curetted, and the fragments thus brought away being obviously carcinomatous, the abdomen was opened by a median incision below the umbilicus and its cavity carefully palpated for possible secondary growths. No such having been found, the patient was put in the Trendelenburg position, and complete hysterectomy (after Wertheim's method) was carried out, the chief steps being: First, incision of the right broad ligament, ligature of the corresponding ovarian vessels and round ligament; secondly, the uterine vessels and the ureter were then exposed and the uterine artery ligatured external to the ureter, which was next freed from the surrounding uterine and vesical veins up to its attachment to the base if the bladder; thirdly, the peritoneum was incised across the front of the body of the uterus, and the bladder was carefully pushed down clear of the uterus and of the uppermost part of the vagina. The left broad ligament was now incised, and the parts in and below it were treated exactly as had been done on the right side. Careful search was next made for enlarged glands along the internal iliac vessels, but no such glands were found. It proved difficult to free the terminal part of the left ureter, the cancerous tissue coming rather close to it in this situation, and making it the more important to dissect away the blood-vessels as close to the pelvic wall as was safe. This having been done, the utero-sacral ligaments and the peritoneum across the bottom of Douglas's pouch were divided. The parts were now ready for removal, but at this stage a little more delay was caused from the fact that owing to the shortness of the vagina it was found impossible to apply the clamps as is usually done. The vagina, therefore, was mapped out with 1 in 20 carbolic solution and then divided by scissors from within the abdomen. The cut edges of the vagina were then united by catgut stitches threaded on curved needles and passed so as to miss the mucous surface. The cut edges of the peritoneum were next united by continuous catgut suture. The patient was then lowered into the ordinary dorsal position and the anterior incision closed in three layers.

Mr. Clarke said that during the past two years some six or seven patients had been admitted to the hospital on suspicion of their having cancer of the uterus. All except the case under consideration had proved to be something else, some less formidable affection being discovered. As to operative details, a good view of the pelvis was obtained by using a Doyen's retractor at the lower part of the wound, and a self-retaining double retractor at the upper part.

The operation was somewhat prolonged by the two circumstances before referred to, and the patient suffered from shock to a moderate extent, but she rallied well under the ordinary care and made an uninterrupted recovery. Three weeks after the operation she was convalescent.

TRANSACTIONS OF SOCIETIES.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Meeting held July 3rd, 1912.

Dr. James Ritchie in the Chair.

Dr. W. T. **Ritchie**, for Dr. Lovell **Gulland**, showed a man, æt. 26, suffering from

LYMPHADENOMA.

There was enormous glandular enlargement. One of the glands had been excised and showed the typical changes of the condition. The leucocytes numbered 32,200 per c.mm., with 86 per cent. of polymorphs. There was no excess of eosinophils, but evidence existed of large intra-thoracic growth. There had been some improvement after an injection of salvarsan, but in a fortnight the patient was as bad as ever. A second dose apparently did little good, and gave rise to symptoms of arsenical poisoning.

Dr. Ritchie also exhibited, for Dr. Gulland, a case of Stokes-Adams syndrome with apparently permanent heart-block.

Dr. **Chalmers Watson** read a paper on the

FOOD REQUIREMENTS OF CHILDREN.

In connection with the feeding scheme of the Edinburgh School Board an analysis had been made of the dietary of eight children about five years of age in good circumstances—all the children of medical men. It was found that the protein intake in these children was much greater than that indicated by the Atwater standard. While the Atwater standard for a child of five was—protein 48, fat 40, carbohydrates 168 grams. = 1,220 calories, the analysis of the food of the medical children was—protein 71, fat 67, carbohydrates 198 grms. = 1,725 calories. The latter standard was probably the more reliable guide, but the importance of chemical composition *per se* could easily be overestimated. In children of gouty and tuberculous tendency special rules applied. The adulteration of food and the effects of bleaching flour were referred to.

The following was suggested as a cheap average diet for a child:—

	Protein.	Fat.	Cost.
Breakfast—			
Oatmeal, 1 oz. ...	19.5	20	1.2d.
Treacle, 1 oz. ...			
Milk, ½ pint ...			
Bread, 2 oz. ...			
Margarine, ¼ oz. ...			
Dinner	30	10	1.4d.
Tea—			
Bread, ¼ lb. ...	21	19	1.2d.
Margarine, ½ oz. ...			
Milk, ½ pint ...			
	70.5	49	3.8d.

The following table shows the single-course dinners arranged for a week by the Edinburgh School Board (over 2,000 children):—

	Protein.	Fat.	Carbohydrate.	Cost.		
Lentil soup	29.5	3.7	112.6	£6	3	0
Meat and potatoes ...	18.5	9.4	67.2	11	14	4
Plum pudding ...	36.4	20.2	151.4	12	12	7
Scotch broth	28.2	8.1	71	8	4	3
Porridge and biscuit	24.5	4.1	105.3	5	13	5
Grm.	27.1	9.3	102			1.2d.

Dr. **Goodall** said that he agreed with Dr. Watson that the standard suggested by Atwater's tables for a child of five was too low. The standard was 0.4 of a man at moderate work, but a healthy child of five was not content with moderate work, but did hard work as long as it could keep awake. He thought that young children should be allowed a considerable amount of red meat. He had seen marked improvement in the case of many children after farinaceous food had been largely replaced by meat.

Dr. **Dingwall Fordyce** said that meat was an important item in the dietary of children under the first dentition.

Dr. **Porter** said that heredity and personal idiosyncrasy must be carefully studied. He thought that putrefactive changes were greater after meat than after vegetable proteins.

Dr. **Pirie** stated that he knew the case of two vegetarian families who had never had meat. All the children were in robust health. He thought the School Board dietaries were wanting in anything which might conserve the teeth.

Dr. **James Ritchie** thought a great deal of the bad feeding among the lower classes was due to their ignorance of cooking and of economical purchasing. He had seen cases of tape-worm infection from the administration of raw meat. The active habits of children certainly demanded a liberal food supply, but he thought the source of the foodstuffs should be milk products and vegetable food rather than meat.

Dr. W. T. **Ritchie** read a paper on

VAGUS STIMULATION AND PARESIS IN THE TREATMENT OF CARDIAC IRREGULARITIES.

The inhibitory influence of the vagus was described and electro-cardiograms were shown illustrating the effects of stimulation of the vagus by digital compression in the neck. Digitalis and strophanthus acted directly on the heart and also stimulated the vagus. These drugs slowed the heart, strengthened the ventricular beats, depressed the conductivity of the auriculo-ventricular bundle, and in small doses depressed the excitability of the heart muscle in a manner comparable to vagus stimulation. All therapeutic measures which stimulate the vagus should be useful when the heart's rate is excessive. In some cases of rhythmic tachycardia due to valvular lesion and cardiac failure these measures might prove ineffective, and the same applied to some cases of paroxysmal tachycardia. The disappearance of extra systoles in cases of cardiac failure under treatment with digitalis was usually coincident with the disappearance of dyspnœa, cyanosis and œdema, and might be due to other factors than depression of excitability by vagus stimulation. In auricular fibrillation, all forms of vagus stimulation might act beneficially in virtue of their action on the auriculo-ventricular bundle. Atropin was useful in cases of partial heart-block. In *pulsus alternans* digitalis might be of service in slowing and strengthening the heart, in abolishing the alternation and in giving relief to the patient.

SPECIAL REPORTS.

THE BICENTENARY CELEBRATIONS, TRINITY COLLEGE, DUBLIN.

Not since the Tercentenary Celebrations in Trinity College exactly twenty years ago, has academic Dublin been so gay as last week. The Celebrations opened in magnificent weather on Thursday afternoon with a reception of guests and delegates in the College Library. The ordinary somewhat sombre interior was a blaze of colour as the various visitors in full academic dress filed past the Chancellor (Lord Iveagh) and the Provost (Dr. Anthony Traill). In addition to the guests some hundreds of Dublin graduates assembled with their lady friends in the Fellows' Garden for afternoon tea.

The reception took place in the Library—a happy choice, if only on account of the fitness of the large room of the Library as a dignified setting for the notable formality. There was, however, more than that in the choice. The scene of the reception was the building nearest to the site of the old Anatomy House in which the Medical School was opened two hundred years ago. This site was, in the terms of the order setting it apart for the building of a laboratory and anatomical theatre, "at the south-east corner of ye Physic Garden"; the Physic Garden having been somewhat in the region of the present Library, extending probably for some distance into the present Fellows' Garden. The cosmopolitan element was strong in the gathering. There were delegates from Cairo, Tokyo, Tomsk, St. Petersburg, Moscow, Upsala, Helsingfors, Groningen, Paris, Stockholm, Norway, Berne, Malta, Copenhagen, Utrecht, Ghent, Liége, Geneva, Bordeaux, Vienna, Bonn and Munich, and from many of the leading cities of the United States. Then there were the Empire delegates, representing Montreal, Toronto, Melbourne, Sydney, Adelaide, Lahore and Madras. Coming back to the home countries, London was represented by its first medical Lord Mayor, Sir Thomas Crosby, and by many distinguished men representing London hospitals and institutions having their headquarters in the capital of the Empire. There were delegates from the English and Scottish provinces—Oxford and Cambridge, Liverpool, Manchester, Birmingham, Leeds, Sheffield, Newcastle, Bristol, Cardiff, York, Edinburgh, Glasgow, Aberdeen, St. Andrews and Dundee. Belfast, Cork and Galway had their official delegates, and all parts of Ireland were represented by the general assembly of medical graduates. There were representatives of the Municipality of Dublin—the Lord Mayor (Councillor Lorcan Sherlock) and Alderman Dr. M'Walter.

Question of a Permanent Memorial.

Immediately after the reception a meeting of graduates was held in the Examination Hall, Trinity College, in the afternoon, to consider the establishment of a permanent memorial of the Bicentenary of the Medical School. Mr. Robert Woods, ex-President of the Royal College of Surgeons in Ireland, occupied the chair. There was a large attendance.

The following resolutions were unanimously carried, the speakers being the President of the Royal College of Surgeons (Dr. Purefoy), Sir Henry Swanzy, Sir John Moore and Dr. W. R. Dawson:—

(1) "That it is desirable to establish a permanent memorial of the bicentenary of the Dublin University School of Medicine, and that for this purpose a fund be opened to be called the Bicentenary Memorial Fund."

(2) "That the duty of collecting subscriptions, and, subject to the approval of the Board of Trinity College, determining the form which the memorial shall take, be entrusted to the following Committee:—Mr. Robert Woods, Chairman; Dr. James Little, Mr. R. D. Purefoy, President R.C.S.I.; Sir Charles Ball, Sir W. Launcelotte Gubbins, K.C.B., Director-General R.A.M.C.; Sir John Moore, Sir John Lentaigne, Professor A. Macalister, Cambridge; Dr. Henry Jellett, Dr. W. S. Haughton, Dr. W. Dawson, Dr. F. W. Kidd, Dr. T. E. Gordon, Dr. T. G. Moorhead, Dr. J. Lumsden, Dr. Heaney, Dr. M. J. Bulger, Dr. T. W. Goodbody, Dr. T. R. Bradshaw, Dr. Patten and Dr. Cassidy; Dr. W. G. Harvey and Dr. R. J. Rowlette, Hon. Secretaries; Sir Henry Swanzy and Dr. S. Pringle, Hon. Treasurers."

Graduates' Dinner.

On Thursday evening some 400 graduates and guests sat down to dinner in the Round Room of the Mansion House, kindly lent by the Right Honourable the Lord Mayor. Unfortunately the Lord Mayor was unable to be present, but his place was taken by Mr. Andrew Beattie, D.L., *locum tenens* Lord Mayor. Mr. Beattie and the Lady Mayoress, in conjunction with Mr. Robert Woods, Chairman of the Graduates' Committee, received the guests in the Oak Room. Mr. Woods subsequently presided at the dinner. To his right sat:—

The Lord Lieutenant, K.T.; the Provost, Right Hon. Michael Cox, P.C.; Professor Sir William Osler, Bart., Regius Professor; Professor James Little, Regius Professor; Count Morner (Stockholm), Sir Thomas Barlow, Bart., P.R.C.P. (England); Professor Henri Hartmann (Paris), G. A. Berry, P.R.C.S. (Ed.); Professor Ernest Fuchs (Vienna), Sir Henry Morris, Bart., Sir Hawtrey Benson, P.R.C.P.I.; Professor Thayer (Baltimore), Sir Henry Swanzy, Professor Allvar Gullstrand (Upsala), Sir J. Halliday Croom, Professor J. G. Adami, F.R.S. (Montreal); Professor Francis Gotch, F.R.S.; Sir William Whitla, Professor Johan Nicolaysen (Norway), Sir F. H. Champneys, Bart., Sir J. M'Fadyean, Professor Faber (Copenhagen), Sir Malcolm Morris, K.C.V.O.; Professor R. von Wettstein (Vienna), and the Rev. Dr. Mahaffy.

The following gentlemen sat to the left of the Chairman:—

Councillor A. Beattie (*locum tenens* Lord Mayor); the Lord Mayor of London, Right Hon. Jonathan Hogg, P.C.; Professor Howard Marsh (Master Downing College), Professor Sir Charles B. Ball, Bart., Regius Professor; Professor Maximow (St. Petersburg), Sir Rickman Godlee, Bart., P.R.C.S. (England); Provost Edgar Smith (Philadelphia), Surgeon-General Sir Launcelotte Gubbins, K.C.B., Director-General R.A.M.C.; R. D. Purefoy, P.R.C.S.I.; Sir William Macewen, F.R.S., Prof. Hans Meyer (Vienna), J. A. Adams, P.F.P.S. (Glasgow); Professor Robert Saundby, Pres. Brit. Med. Assoc.; Professor Hans Leo (Bonn), Professor R. W. Reid, Professor A. F. Dixon, Professor R. D. Thane, Professor Blanchard (Paris), Professor Langley, F.R.S.; Sir John Ross of Bladensburg, K.C.B.; Right Hon. the Recorder, P.C.; W. A. Jamieson, Vice-Pres., R.C.P., Edin.; and Sir A. Pearce Gould, K.C.V.O.

The other guests were accommodated at seven long tables on the main floor, Dr. R. J. Rowlette, Dr. Seton Pringle and Dr. W. G. Harvey, hon. secretaries, acting as croupiers.

During dinner the orchestral band of the Royal Irish Constabulary, under the baton of Mr. William Rafter, played a selection of music.

After dinner a number of toasts were proposed. The speakers were Mr. Robert Woods, His Excellency the Lord Lieutenant, Dr. G. A. Gibson of Edinburgh, the Provost of Trinity College, Sir William Osler of Oxford, Dr. A. C. O'Sullivan of Dublin, the Lord Mayor of London, Dr. Blanchard of Paris, Dr. Maximow of St. Petersburg, Dr. Thayer of Baltimore, Sir Charles Ball of Dublin, and the Lord Mayor *locum tenens* of Dublin. Unfortunately the greater part of the excellent musical programme had to be squeezed out, owing to the length of the toast list. The arrangements for the dinner were excellent.

While the guests of the School of Medicine were entertained to a banquet at the Mansion House, the Ladies' Committee held a reception at Trinity Hall, where the visitors were all ladies, and no one could say it was not a very pleasant party. All the hostesses in town brought their guests, and a happy opportunity was given of welcoming the distinguished foreigners to Dublin. Lady Hawtrey Benson and Mrs. Lecky, Lady Ball, and Mrs. Robert Woods received the guests in the handsome drawing-room, and Miss Walton's band played on the gallery.

Honorary Fellowships at the Royal College of Surgeons.

A meeting of the Royal College of Surgeons was held for the purpose of conferring the Honorary Fellowship of the College upon the following:—

Professor Irving Heward Cameron, LL.D., F.R.C.S. (Toronto); Mr. Robert Jones, F.R.C.S. (Liverpool); Sir William Macewen, D.Sc., LL.D., F.R.S. (Glasgow); Sir Henry Morris, Bart., F.R.C.S. (London).

The President, Mr. R. Dancer Purefoy, M.D., presided.

The Honorary Fellows were presented by Mr. Conway Dwyer, Vice-President, and Sir Charles Cameron, Hon. Secretary of the College.

Reception of Addresses.

On Friday, 5th, proceedings opened with the unveiling of the memorial stone to Dr. John Stearne, founder of the College of Physicians, by the Provost, and an address by the Rev. J. P. Mahaffy, C.V.O.

Then followed the central ceremony of the Festival—the reception of congratulatory addresses by the Chancellor and Provost. Representatives of the following bodies in turn ascended the dais, and presented addresses, in most cases beautifully decorated:—

Japan.—University of Kyoto; University of Tokio.

Russia.—University of Tomsk; St. Petersburg, Imperial Institute of Experimental Medicine; Imperial Clinical Institute of the Grand Duchess Helena Pavlova; Imperial Military Academy in St. Petersburg; Women's Medical Institute St. Petersburg; University of Moscow.

Finland.—University of Helsingfors.

Austria.—University of Vienna.

Egypt.—Cairo, Medical School.

Switzerland.—Geneva University.

Belgium.—University of Ghent.

Holland.—University of Gröningen.

Sweden.—University of Upsala; Swedish Academy of Sciences, Upsala; Stockholm, The Medico-Chirurgisches Institute; Royal Swedish Academy of Sciences, Stockholm.

Norway.—Christiania, Royal Fredicks University.

Denmark.—Copenhagen University.

France.—University of Bordeaux; University of Paris; Academy of Medicine, Paris.

United States of America.—Ann Arbor University of Michigan; Harvard University; University of Pennsylvania.

Canada.—McGill University, Montreal; University of Manitoba, Winnipeg; Queen's University, Kingston, Ontario; University of Toronto; Royal Society of Canada; School of Medicine and Surgery, Laval Medical Faculty in Montreal.

India.—University of the Punjab.

Australia.—University of Melbourne; University of Sydney.

England.—University of Oxford; University of Cambridge; Royal College of Physicians; Royal College of Surgeons; London University; Society of Apothecaries; Victoria University of Manchester; Liverpool University, Faculty of Medicine; Newcastle-on-Tyne, Medical College; Birmingham University; University of Durham; University of Sheffield; University of Leeds; University of Bristol; Physiological Society; Association of Physicians of Great Britain and Ireland; Royal Veterinary College of London; The Hunterian Society; General Medical Council; Royal Society of Medicine; British Medical Association; British Dental Association; Royal Institute of Public Health; University College Hospital, Medical School, London; King's College Hospital, Medical School, London; St. Bartholomew's Hospital, Medical School; Guy's Hospital, Medical School; St. George's Hospital, Medical School; Middlesex Hospital, Medical School; Charing Cross Hospital; Royal Free Hospital School of Medicine for Women.

Scotland.—Edinburgh University; Royal College of Physicians, Edinburgh; Royal College of Surgeons, Edinburgh; University of Glasgow; Royal Faculty of Physicians and Surgeons, Glasgow; University of Aberdeen; St. Andrews University; University College, Dundee; Royal Society of Edinburgh.

Ireland.—Royal Irish Academy; Royal College of Surgeons in Ireland; National University of Ireland; Queen's University, Belfast; University College, Dublin; Royal Dublin Society; Royal Academy of Medicine in Ireland; Royal Veterinary College of Ireland.

An interesting point was that in many cases the delegates were graduates of Dublin, who now occupy important positions in other learned bodies. Thus, the following were represented by old Trinity men:—Cairo by Dr. H. P. Keatinge, Cambridge by Professor Macalister, Victoria by Dr. F. W. Lamb, Liverpool by Dr. F. R. Bradshaw and Dr. A. A. Mussen, Newcastle-on-Tyne by Professor Rankin Lyle, Durham by Professor David Drummond, Sheffield by Professor C. J. Patem, St. Andrews by Professor W. R. Scott, the Royal College of Surgeons in Ireland by Dr. R. D. Purefoy and Mr. Robert Woods, the National University of Ireland by Sir Christopher Nixon, the Royal Dublin Society by Dr. J. M. Pursel, and the Royal Academy of Medicine in Ireland by Professor J. A. Scott. Many of the graduates of Dublin were delegates of bodies which did not present addresses.

When all the other delegates had handed in the respective addresses Professor Dixon read a further list of bodies not represented:—The Universities of Bologna, Lund, Montpellier, Munich, Budapest, Innsbruck, Leipzig, Giessen, Tübingen, Konigsberg, Lausanne, Naples, Berne, Bohemian University, Prague, and the German University, Prague, and the Royal Academy of Medicine. These had sent addresses or congratulatory letters or telegrams, conveying good wishes for the future of the Medical School of Trinity College, and regrets at being unable to be personally represented at the ceremony.

On Friday afternoon the Chancellor of the University, Lord Iveagh, opened his beautiful gardens in St. Stephen's Green to the various guests and a large company. His Excellency the Lord Lieutenant was among those who attended the garden party. The gardens are singularly beautiful and charmingly laid out, and, for a town garden, are remarkably extensive. Lord Iveagh has, with characteristic generosity, presented a strip at one side of the gardens to the University College, Dublin, as a site for their new buildings.

DRAMATIC PERFORMANCE OF "SHE STOOPS TO CONQUER."

On Friday evening the Dublin University Dramatic Society gave an amateur performance of "She Stoops to Conquer" in the Queen's Theatre. The choice of a play was singularly appropriate. Oliver Goldsmith was a student of Trinity College, and later a member of our profession. The members of the Dramatic Society rose to the dignity of their task. Mr. Pigot, in particular, who played "Tony Lumpkin," showed a sense of fun, as well as a minute study of his part, which rendered his presence on the stage a constant joy. But every member of the caste threw himself into his part with so much verve and restraint that the play held the house from the rise of the curtain to the fall.

Before the first Act, an ode for the occasion, written by Mr. Oliver St. John Gagarty, F.R.C.S.I., was read by Dr. R. G. Tyrrell. Mr. Gagarty is well known as a writer of light verse, but in his Bicentenary Ode he rose to a high dignity, lightened here and there by soft touches of humour.

All the guests attended in full academic dress and the house was a blaze of colour, which must have been singularly inspiring to the actors. After the play many of the visitors attended the Trinity Week Dance, held by the students the same night.

VISIT TO THE SCHOOL OF MEDICINE.

Proceedings opened early on Saturday with a visit to the Medical School, where visitors had an opportunity of inspecting the interesting historical exhibition arranged by Dr. Kirkpatrick. There were portraits of many of the men most famous in the history of the school—Robinson, the two Stokes', Graves and others; plans of the College and maps of Dublin at different eras; class-rolls of Macartney's time, and many other objects of the greatest interest.

MEMORIAL BRONZE TO DR. D. J. CUNNINGHAM.

The task of unveiling a bronze memorial erected in the School of Anatomy by the piety of his pupils to the late Daniel John Cunningham was entrusted to Dr. James Little, Regius Professor of Physic. Cunningham was for some twenty years Professor of Anatomy in Dublin, and it was here that his best work was done. The bronze is a portrait in profile by Mr. Oliver Sheppard, D.H.A., who, with great skill has succeeded in reproducing Cunningham's remarkable luminosity of countenance.

PROCESSION TO THE ROYAL COLLEGE OF PHYSICIANS.

Immediately after the unveiling a procession was formed in the College Park, which proceeded by way of College Green and Nassau Street to the Royal College of Physicians. In front marched the Trinity College contingent of the Officers' Training Corps, with its band. Then came the Fellows of the College of Physicians with the mace of the College. Next came the medical students of Trinity College, medical graduates, guests and delegates, and finally the Chancellor and Provost, with the University mace.

On arrival at the College of Physicians, the delegates and guests were received by Sir Hawtrey Benson, President, and the Fellows of the College. The reception over, a large company assembled in the large hall, where the ceremony of conferring Honorary Fellowships was held.

The following is the list of Honorary Fellows elected on the occasion:—

Norman Moore, M.D., Sir David McVail, F.F.P.S., Glasgow; James Mackenzie, M.D., London; George A. Gibson, M.D., Edinburgh; J. Mitchell Bruce, M.D., London; Sir Thomas Barlow, Bart., M.D.; Robert Saundby, M.B., Birmingham; Professor Thayer, Baltimore.

The President of the Royal Academy of Medicine then conferred Honorary Fellowship of the Academy on the following:—

Professor David Drummond, Newcastle-on-Tyne; Professor Kund Faber, Copenhagen; Professor Howard Marsh, Cambridge; Professor Johan Nicholaysen, Christiania; Professor V. V. Stroganoff, St. Petersburg; Sir George Savage, London; Professor Hans Leo Bonn; Dr. G. A. Berry, Edinburgh; Professor A. C. F. Eternod, Geneva; Professor Sims Woodhead, Cambridge; Professor Anderson Stewart, Sydney; Dr. H. P. Keatinge, Cairo.

Conferring of Honorary Degrees.

In the afternoon was the ceremony of Conferring Honorary Degrees by the University. The list of recipients has already been published. The candidates were presented by Dr. T. C. Pursee, Public Orator, in Latin oratories.

Dinner in the College Hall.

In the evening the Provost and Senior Fellows entertained the entire company of guests in the College Hall. Several toasts were proposed, the speakers being the Provost, Rev. J. P. Mahaffy, His Excellency the Lord Lieutenant, Dr. James Little, Professor Gullstrand of Upsala, Professor Leo, of Bonn, Principal Peterson of Montreal, Sir Thomas Barlow, Professor Starling, and Professor Dixon.

So ended three days of a remarkable celebration. The arrangements were excellent in every detail, and reflected great credit on everyone concerned, and chiefly on the Honorary Secretary, Professor A. F. Dixon. The weather was perfect, dry and cool.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, July 6th, 1912.

At the Hufelandische Gesellschaft, Hr. Koblank discussed the subject,

The Treatment of Septic Abortion.

He said that in his opinion the fact that there was scarcely any diminution in the mortality from childbirth was due mainly to the frequency of infection after intentional interruption of pregnancy. Physicians were not called upon to discuss the great social question of the prevention of criminal abortion, but it was their duty to point out that not only beings coming into existence but large numbers of mothers lost their lives through it.

Their manifest aim in the treatment of septic abortion was twofold—a prophylactic, not to spread the germs any further into the system; and a therapeutical to combat the infection to the best of their ability. All their striving could not, however, always be successful.

For the fulfilling of the first indication, Winter had proposed that before removing the contents of the uterus in a case of abortion, the germs in the vagina should be examined, and if the most toxic germs were present, the hæmolytic streptococci, the clearing out of the uterus should be left entirely to the contractions of the uterus to effect, so long as dangerous hæmorrhage did not compel manual interference, as it had been shown that such clearing out would force some of the bacteria into the blood tract. Against this, however, Schottmüller had objected that by this delay the condition would be made worse, as the infective bacteria would have all the more time to penetrate into the tissues.

The speaker must take his stand alongside Schottmüller as regarded this. He would, moreover, emphasise two points. In common with other investigators, they had found in the Virchow Hospital that germs found their way into the blood current, not only when the uterus was cleared out manually, but also after spontaneous clearing out. It was, moreover, certain that not only the hæmolytic streptococci were the cause of fatal infection in childbed, but also a number of other germs—staphylococci, coli bacilli, and non-hæmolytic streptococci. For these reasons it was not necessary in practice to obtain cultivations of the vaginal germs. (The speaker here showed both aerobic and anaerobic cultures of germs of puerperal infection.)

For the prevention of the further spread of germs into the system it was above all absolutely necessary to avoid injury of the walls of the uterus. This, however, was impossible when the much-beloved curette was made use of. Penetration of the uterine wall with this instrument was not an infrequent occurrence, yet the instrument must perforate the uterus when the decomposition had reached a certain stage. (Here a uterus was shown the fundus of which was quite soft.) Perforation through the vaginal arch behind the uterus was criminal, but an instrument in scraping out the uterus must break through. In one similar case a portion of the fœtus found its way into the abdominal cavity, but the life of the patient was saved by timely laparatomy. (Fœtal parts of the case handed round; they were the head and thorax.) Another patient was admitted into hospital with part of a Bozemann catheter sticking through the uterine wall. The weapon was removed after splitting up the wall of the uterus and the patient recovered.

In determining the question of blame in such cases the condition of the uterine wall must always be borne in mind. In one case a five-months fœtus was expelled spontaneously before their eyes, after which the patient collapsed. The abdomen was opened at once, when a hole was found in the uterus. The patient recovered after total extirpation of the organ. It was not only in consideration of the danger of inflicting gross injury that he would utter a warning against the use of the curette, but also in the knowledge that the instrument caused a large number of small wounds in the uterus through which bacteria could enter the blood channels. When the remains of an abortion had been separated from the uterus by the finger, and then could not be withdrawn through the narrow cervix, they might be removed by the large dull curette or by forceps adapted to the purpose.

As regarded the surgical treatment of puerperal sepsis he would only remark generally that they ought not to follow up the enemy by the track through which he effected entrance, by washing out, cauterisations and scrapings, but they must get in advance of the infection, and after opening the abdomen remove the chief centre or, if necessary, the whole of the infected area.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Appointment of Dr. Milne to the Professorship of Kansas University.—Dr. Lindsay S. Milne who, a few years ago, was assistant to Professor Greenfield, and held a number of resident posts in the Edinburgh hospitals, and who has for the past two years been senior pathologist to the Russell Sage Institute, New York, has been offered, and has accepted, the post of Professorship of Medicine in the University of Kansas, Kansas City, U.S.A. Dr. Milne was extremely popular among his colleagues in Edinburgh, and we all wish him well in his new office.

Royal Infirmary, Edinburgh.—Appointment.—Mr. D. B. P. Wilkie, F.R.C.S.Ed., has been appointed Assistant Surgeon to this Institution. There were seven candidates for the post.

Baldoran Institution for the Feeble-minded.—The first change chronicled in its annual report is a euphemistic change in the name of the institution. Henceforth the term "Feebleminded" replaces that of "Imbecile Children." The change is altogether for the better, not only from the point of view of humanity, but for the sake of accuracy, for the Institution is primarily a school for the huge middle-class of feeble-minded children who can now be taught as other children. The idiot is too bad for such an institution, and the merely backward child too good. There have been admitted 52 children during the year—33 boys and 19 girls. It is regretted that the average age on admission—nine years—is higher than is desirable, and in most cases, so far as could be ascertained there had been little or no attempt at education previously. Of these children, 21 were in good, 25 in fair, 5 in indifferent, and one in bad health. Eight children suffered from paralysis, 2 were hydrocephalic, 2 had heart disease, and 3 were tuberculous. Four were cases of mongolism, and one was a cretin. During the year 19 pupils were discharged—15 boys and 4 girls. Four of these were removed after short periods of residence by the parish councils who had sent them in. A more futile waste of public money than to send children of from 5 to 8 years to an institution of this kind for periods ranging from 7 to 18 months can hardly be conceived. Of the remaining 15 children discharged, 3 were unimprovable; the other 12 had considerably improved. Notwithstanding that in Baldoran it is the sexual rather than the educational factor which determines the time of discharge, it is gratifying to learn that the average age this year was slightly over 18, and their period of residence 8½ years. How greatly the legislation foreshadowed by the Bill recently introduced is needed is shown by the report on the further history of these discharged patients. "Three children, who averaged 9 years' residence, left the home to assist in earning a livelihood or making themselves acceptable at home. Two were sent to adult asylums, and one was returned to her parents. Five were boarded out by their respective parishes, and two were placed under the care of the Inspector of Poor. Of the latter, one was a deaf mute, and probably would be transferred to an adult asylum. The lot of the other was peculiarly regrettable. He was removed by the Parish Council *because* he was 14—the age when normal children leave school—and shortly afterwards was committed to an asylum. The boy had done well at Baldoran, and had learned much; had he been allowed to remain another three or four years he would probably have been able to support himself, but instead he is removed "because he is fourteen," and placed in an institution where his upkeep will be more expensive than in Baldoran. Of the other children three were quiet, clean, but incapable of learning much; they were good cases for boarding out. The remaining four children are doing well—one in service, and three boarded out, and most helpful in their situations. Ten deaths occurred during the year from broncho-pneumonia, phthisis, acute pneumonia, heart failure, wasting, hydrocephalus, and epilepsy. The Commissioners in Lunacy report favourably on Baldoran, and the annual report concludes with a number of statistical tables.

National Insurance Act.—The general feeling in Edinburgh, since the Commissioners' reply to the State Sickness Insurance Committee was made public on July 5th, is that the Association should now break off negotiations, which are apparently foredoomed to failure, and can only lead to further irritation through their futility. The probability that this course will be followed is hailed with relief. The profession is fully prepared to take the necessary steps to meet the contingency of the medical benefits being suspended. They are glad to learn that the Chancellor of the Exchequer has at last discovered that the weapon with which he threatened them when he addressed the Friendly Societies in the spring of the year is a double-edged one, and that he appears now to be afraid of the consequences of putting his threat into action. In the meantime, the attempts of the Insurance Commissioners to induce medical men to join the Provisional Insurance Committees have to a very large degree failed, for only in one or two areas have their appointments been accepted.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE ALEXANDRA DAY FUND AND ITS DISTRIBUTION.

To the Editor of The Medical Press and Circular.

Sir,—The response of the people of London to the appeal for the hospitals recently made in the name of our revered Queen Mother has been striking and full of pathos. A large sum of money has been collected in aid of those voluntary medical charities which form a standing protest alike against the Gradgrind and the socialist tendencies of the present age of chameleon-like evolution in which we are taking part.

Now, Sir, the object of my letter is to enter a timely warning as to the distribution of the large sum of money collected on Alexandra Day. In London there are hospitals of all kinds, large and small, general and special, but all are engaged alike in relieving the wants of the suffering and in advancing the cause of medical science. It has, unhappily, come about that the King Edward and the Hospital Sunday Funds have adopted the policy of attempting to extinguish the smaller institutions. The only official recognition of the Funds in their case comes from the Metropolitan Hospital Saturday Fund, which has steadily maintained its support of small and special hospitals.

As a member of the medical staff of more than one special hospital for more years than I care to recall, I can assert that an incredible amount of good work to the community is performed year in and year out by such institutions, and that the highest scientific aims and the highest professional traditions are maintained there in spite of struggles and difficulties of which little or nothing is heard in the outer world. Therefore, let me put in a plea for those who have no powerful friends on the Distribution Committee.

I am, Sir, yours truly,
Ignotissimus.

London, W.
July 6th, 1912.

NATIONAL INSURANCE SCHEME—DOCTORS' FEES.

To the Editor of The Medical Press and Circular.

Sir,—Within the past few weeks much has been said by public speakers at Friendly Society conferences, and at political meetings, regarding the medical aspect of the Insurance Act. The remarks of many of these speakers prove that they know very little about the matter. They, however, throw much light on the insurance finances, and show clearly that the insurance funds, got as contributions from, or on behalf of, insured persons, can—if properly managed—easily afford to pay the fair and reasonable 8s. 6d. capitation fee asked for by the medical profession. I have already written on this important point, believing that, if it were clearly understood that there are sufficient funds to allow of an 8s. 6d. capitation fee, the Insurance Commissioners would readily grant it, and so end the "deplorable medical difficulty" which would never have come into being had advice been sought in the beginning from medical men qualified to give it.

A few facts taken from a mass of statistics lying before me will, I think, make my position clear, and may be useful and much needed information to many who ought to, but do not, know much about the subject. In giving statistics—which are obtained from competent Friendly Society officials—I do not go into vulgar or decimal fractions. They are given in the same simple and easily-understood style as the "9d. for 4d." statement, but with much more accuracy:—

(1) The State has already recognised 8s. 6d. per head as reasonable remuneration for the work to be done under the Insurance Act by giving that sum to the Post Office doctors, who are in every respect club doctors.

(2) The average contribution of Friendly Society members has hitherto been 7d. per week. The State Insurance contribution for insured persons is to be 9d. per week. There are 5,000,000 Friendly Society contributors, there will be 15,000,000 Insurance contributors.

(3) The Friendly Societies have an excellent organisation, the upkeep of which—averaging 3s. 6d. per member per annum—is deducted from members' contributions, and this organisation must be kept up for behoof of their members. The Insurance Scheme has arranged to avail itself of the Friendly Societies' organisation and pay a share of the expenses which, if arranged in a businesslike manner, should be much less than 3s. 6d. per member per annum, seeing that the arrangement is a pure amalgamation whereby 15,000,000 insured persons are to be added to the 5,000,000 Friendly Society members. If contributions of 3s. 6d. from 5,000,000 have hitherto paid for the organisation, a much smaller contribution will be necessary when an additional 15,000,000 are made to contribute.

(4) The Friendly Societies have hitherto paid their doctors, on an average, 4s. per member per annum, this sum being also deducted from members' contributions. These statistics (3 and 4) show a deduction from Friendly Society members' contributions of 7s. 6d. per member per annum for management expenses and doctors' salaries.

(5) The sick benefits hitherto given by Friendly Societies are much greater than the proposed Insurance Scheme benefits as shown below:—

	Benefits from Friendly Societies (Weekly contributions 7d., from 5,000,000 Members).	Benefits from Insurance Scheme (Weekly contributions 9d., from 15,000,000 Insured Persons).
For first 26 weeks of illness ...	10s. per week	10s. per week
For second 26 weeks of illness	7s. ,,	Nil.
Up to end of second year of contributing	5s. ,,	Nil.
From second year up to age of 70	5s. ,,	5s. per week
After 70, for remainder of life	5s. ,,	Nil.
At death of member	£10	Nil.
At death of member's wife ...	£5	Nil.
At death of member's child ...	£2 10s.	Nil.
To compensated cases under Compensation Act	Full benefits as above	Nil.

Within recent years some slight changes have been made in a few of the Friendly Society benefits given above, but as my statistics are retrospective—to show what Friendly Societies have done—those alterations do not in the least affect my argument.

(6) While Friendly Societies—as shown above—have been paying out of members' contributions—small in number and amount as compared with the contributions of insured persons—a sum equal to 7s. 6d. per member per annum for management expenses and doctors' salaries, and have been giving much greater sick benefits than the Insurance Scheme proposes to give, they have besides accumulated a reserve fund—in other words, "saved"—somewhere about £30,000,000. The "Oddfellows" alone have nearly £16,000,000 of a reserve fund.

It is hardly necessary to point out that the above statistics show clearly that the State Insurance funds, if properly managed, will be more than sufficient to pay the reasonable capitation fee of 8s. 6d. per insured person asked for by the medical profession. It is a simple calculation which may be expressed as follows: If Friendly Societies with 5,000,000 members contributing 7d. per week pay full management expenses, give greater sickness benefits, grant 4s. per member for doctor, and save, say, £30,000,000, how much can be saved under the Insurance Scheme with 15,000,000 members contributing 9d. per week and paying only a share of management expenses, and giving much less sickness benefit? With much against them as compared with the Insurance Scheme, Friendly Societies could have paid 8s. 6d. to the doctors instead of 4s., but with diminished savings. How much easier will it be for the Insurance Scheme to pay their doctors the 8s. 6d. asked for? The State ought not to starve the doctors so as to increase its savings.

The remarks regarding doctors recently made at Friendly Society conferences by some of their officials were neither fair nor honourable. The Friendly Societies have made very good terms with the Chancellor of the Exchequer. They are relieved of a very great part of their management expenses, and relieved altogether of the doctors' salaries, so that in future they will be able to increase very largely the sick benefits to their members. They also know very well that there will be large surplus Insurance funds which they expect will be divided among themselves as "additional benefits." Hence the ungenerous and selfish feeling displayed by some of their leaders towards the medical profession, the members of which they think should be starved so that they may have larger "additional benefits."

When all is said and done, the main object of the National Insurance Scheme is to raise the standard of the national health—to reduce sickness and death—and I would seriously point out to all concerned—Friendly Societies included—that cheap medical attendance means in most cases inefficient medical attendance. If medical men are not fairly treated so as to enlist all the members of the profession on the side of the Scheme, then the main object for which it was devised will assuredly be frustrated.

To the members of the medical profession I would point out that seeing there will be ample funds to pay the 8s. 6d. fee asked for, it will be a disgraceful and disloyal act on the part of any member who refuses to join his professional brothers in insisting on this fair and reasonable fee.

Yours very truly,
Angus Macphee, M.D.

Glasgow, July 3rd, 1912.

BRONCHIAL ASTHMA—AN EXPLANATION.

To the Editor of The Medical Press and Circular.

Sir,—I am charitably inclined to help you, if you will let me, out of the difficulty, to which you confess in your review of my book on "Bronchial Asthma," of understanding the drift of the case of nervous asthma which I reported. If you will look again at what I have written, you will find it stated that in accordance with the prevailing custom attacks of asthma are commonly attributed to a bronchial spasm, especially if such cases are seen only in the free intervals, and if there are no organic lesions adequate to account for the functional derangement. I added, however, that if there are opportunities of observing the attacks themselves, there are some in which *no* bronchial spasm exists, but in which at the time air freely enters into and escapes from the lungs without the slightest hindrance within the bronchial tree. The case referred to was one in point, and the beneficial effect of the few whiffs of chloroform was due, as I plainly hinted, to suggestion rather than to the dynamic action of the drug.

But I have not treated of this purely nervous asthma. The form of the disease which is the subject of my book is the one in which the recurrent attacks of dyspnœa are demonstratedly due to a transient endogenous obstacle in the bronchial tree; and the illustrations, which have puzzled you so much, are intended to show the nature of the obstacle and the post-mortem appearances in those circumstances.

I am, Sir, yours truly,
J. B. Berkart.

71 Wimpole Street, W.
July 4th, 1912.

OBITUARY.

SURGEON-GENERAL B. T. GIRAUD.

The death took place last week of Surgeon-General Byng Thomas Giraud, M.D., late of the 31st Regiment, 19th Hussars, and 7th Fusiliers, of 66 Denmark Villas, Hove, aged 76.

The deceased, who qualified as M.D.Edin., in 1857, took part in the Russian War, 1855, serving in the Baltic Expedition and at the bombardment of Sweaborg. In the China War, 1860, he was present at the action of Sinho and the storming of Tangku, and also at the operations against the Taeping rebels, China, 1862-3. In the Afghan War, 1878-80, he served during the sortie on Deh Khoja, the defence of Kandahar, and the battle of September 1st, being mentioned in despatches. During the Egyptian Expedition, 1882, he was present at the battle of Tel-el-Kebir, receiving the bronze star and being promoted to brigade-surgeon. He retired in 1883 with the honorary rank of deputy surgeon-general.

DEPUTY SURGEON-GENERAL C. B. MOSSE, C.B.

We regret to announce the death last week at Oberland, Guernsey, of the Hon. Charles Benjamin Mosse, C.B., C.M.G., late Deputy Surgeon-General A.M.D., and for nearly 25 years Superintending Medical Officer, Colonial Medical Department, Jamaica, aged 82. The deceased, who was M.R.C.S.Eng., L.R.C.P.I., served in the expeditionary force up the River Gambia, West Africa, June, 1866, and was present at the assault and capture of the stockaded Mandingo town of Tubarcolong, being mentioned in despatches. In 1867 he was promoted to staff-surgeon for "valuable services" during an epidemic of yellow fever at Bathurst. He served throughout the Ashanti War, 1873-4, being again mentioned in despatches; he was made a C.B. and received the medal with clasp. He became Superintending Medical Officer for Jamaica in June, 1896, and retired in 1904.

MEDICAL NEWS IN BRIEF.

The Edgar Allen Institute at Sheffield.

The first general meeting of the Council of this Institute was held last week, when the following officers were elected:—Mr. W. Edgar Allen, Chairman; Mr. E. Willoughby Firth, J.P., Vice-Chairman; Mr. S. Doncaster, Hon. Treasurer; Mr. A. Harland, Hon. Secretary.

Mr. Allen, who occupied the chair, and to whose munificence the foundation and upkeep of this Medical Institute is due, expressed his great satisfaction at the work done during its first year. He stated that up to date 505 patients had received treatment, each one of whom had been recommended for treatment by a medical man, the total attendances at the Institute since the opening in July, 1911, being 22,418, the present average attendance being 111 patients daily. He explained that the treatment practised at the Institute (as described in these columns on its foundation) is new to this country, although over 200 similar institutions on the Continent are now treating thousands of patients, some of these establishments being supported by their respective Governments. In thanking the members present for their attendance, Mr. Allen hoped the good work would go on increasing, and expressed the pleasure it gave him in seeing such successful results. He added that he holds himself personally responsible for the entire expenditure during the first three years' working, unless the amounts received enable the Institute to become self-supporting. Nearly the whole of the patients at present are receiving gratuitous treatment.

Dr. R. G. Abercrombie, Medical Director of the Institute, spoke of the support and co-operation which had been given to the Institute by the medical profession of Sheffield, and pointed out the great importance of this co-operation for the utility of this institution. He expressed the opinion that the first year's work had proved to be of real benefit, especially in the after-treatment of accidents and injuries, which are so common among the industrial and mining population of Sheffield and the district.

It may be added that in July, 1911, before the opening ceremony, some ninety members of the medical profession attended and inspected the Institute, and later on the members of the Sheffield Medico-Chirurgical Society, in about an equal number, visited the Institute, when Dr. Abercrombie demonstrated the treatment of patients, and the President of the Society expressed his satisfaction and interest, and approved of the methods of treatment employed.

A Tuberculosis Dispensary for Deptford.

The Deptford Public Health Committee proposes to establish in that borough a tuberculosis dispensary. The estimated cost of fitting and furnishing the premises is £300, and the approximate annual expenditure for staff, rent, rates and taxes, drugs, etc., will be £700.

Royal College of Surgeons of England—Election.

On Thursday last the annual meeting of Fellows was held to elect four members of Council in the vacancies occasioned by the retirement in rotation of Sir Frederic Eve, Sir Anthony Bowlby, and Mr. Gilbert Barling (Birmingham), and by the death of the late President, Sir Henry Butlin. The result of the poll was as follows:—

	Votes.
1. Sir Anthony Bowlby	507
2. Sir Frederic Eve	427
3. Mr. D'Arcy Power	405
4. Sir Berkeley G. A. Moynihan (Leeds) ...	394
5. Mr. Gilbert Barling	387
6. Mr. J. Ernest Lane	339
7. Mr. L. A. Dunn	255

Sir Frederic Eve and Sir Anthony Bowlby were declared re-elected, and Mr. Power and Sir Berkeley Moynihan were elected members of the Council. The poll was a heavy one, 896 Fellows recording their votes. Editorial reference to the election will be found in another column.

University of Durham.

The following candidates have passed in:—

Elementary Anatomy and Biology, Chemistry and Physics.—John Gilmour (first-class honours), Norman Braithwaite, Harry C. Broadhurst, Willmore J. Hooper, George N. Metzger, and Ralph R. Scott.

Chemistry and Physics.—John Brumwell, Dorothy E. Butcher, George A. Clark, Roy N. Craig, Mary R. Campbell, William A. Hewitson, John Horsley, Reginald Hunter, John K. R. Landells, Phyllis Marriott, Reginald S. Millar, George F. Philip, William O. Sinclair, and Kamel I. Shalaby.

Elementary Anatomy and Biology.—Stephanie Patricia L. H. Daniel, Christopher T. Helsham, Donald Henegan, Patrick Hickey, Robert B. Perrie, and William A. Tweddle.

The following candidates have passed the third examination for the degree of Bachelor of Medicine:—

Materia Medica, Pharmacology and Pharmacy, Public Health, Medical Jurisprudence, Pathology and Elementary Bateriology.—Cyril Armstrong (with honours, second class), Ishmael G. Cummings, Charles N. Gover, Mary L. Haigh, Maurice H. de Jersey Harper, Cyril Jacobs, Robert R. Lishman, Edward R. A. Merewether, Francis Metcalfe, Ernest C. G. Parker, Ivan M. Pirrie, Kirton I. S. Smith, Charles R. Smith, and James C. Spence.

Edward Phillips passed in Public Health, Medical Jurisprudence, Pathology and Elemenatry Bacteriology.

Royal College of Physicians of Ireland.

The President and Fellows of the Royal College of Physicians of Ireland, at a recent meeting, decided to confer the Honorary Fellowship of the College on Sir Thomas Barlow, Bart., K.C.V.O., M.D.Lond., President of the Royal College of Physicians of London; John Mitchell Bruce, M.D.Lond., F.R.C.P.Lond.,; George Alexander Gibson, M.D.Edin., F.R.C.P.Edin.; James Mackenzie, M.D.Edin., M.R.C.P.Lond.; Sir David M'Vail, M.B.Glas., F.F.P.S.Glas.; Norman Moore, M.D.Camb., F.R.C.P.Lond.; Professor Robert Saundby, M.D.Edin., F.R.C.P.Lond., President British Medical Association; William Sydney Thayer, M.D., Harvard, Professor of Clinical Medicine, John Hopkins University, Baltimore, U.S.A.

NOTICES TO CORRESPONDENTS, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

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The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Dr. F. C. W. (Yorks.).—One of the great advantages of hedonal is that the after-effects are practically nil, the unconsciousness which supervenes for six or eight hours after the operation sufficing to tide the patient over the usual "vomiting period." Intravenous anæsthesia is to be preferred in many cases to the ordinary method of inhalation. It is noteworthy that lung trouble is very rarely observed after anæsthetics given in this way.

"Anti-Malaria" is informed that chocolate-coated tablets containing tannate of quinine were imported a year or two ago in large quantity to St. Lucia, for distribution in the schools, simple directions being given to the teachers regarding the manner in which the tabloids were to be given.

Dr. F. P. (Suffolk).—The occurrence of the loss of the knee-jerk in pneumonia was described by the late Dr. Hughlings Jackson in 1894. The reflex usually disappears on the third or fourth day, returns about the ninth day somewhat increased, and gradually becomes normal about the end of the second week in ordinary cases. Its disappearance before the third day is said to be of bad import, while if it remain normal until the seventh day recovery may be held to be almost certain.

Inquirer (South Hackney) will find all information about the Health Centre and Dental Clinic, which was started in 1910 in Newport, Essex, by Lady Meyer, in a pamphlet issued by Messrs. J. H. Clarke and Co., of Hight Street, Chelmsford.

Meetings of the Societies, Lectures, &c.

Wednesday, July 10th.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H Duncan). 5.30 p.m.: Eye Operations (Mr. Brooks).

Thursday, July 11th.

Ophthalmological Society (11, Candos Street, Cavendish Square, W.).—5 p.m.: Special Meeting to Consider the Question of Amalgamation of the Ophthalmological Society of the United Kingdom with the Royal Society of Medicine. 8 p.m.: Ordinary Meeting. Card Specimens will be shown by Mr. Jessop and Mr. T. Collins. Papers:—Mr. B. James and Mr. S. Hosford: The Operative Treatment of Glaucoma. The Annual General Meeting will be held immediately after the Ordinary Meeting.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics:—Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

The New London Dermatological Society (Western Skin Hospital, 46 Hampstead Road, N.W.).—4.30 p.m.: Annual Meeting: Dr. D. Walsh will show drawings illustrating the connection between cardiac disease and chronic and re-current skin affections. Clinical cases: Canities and Leucoderma (Dr. P. S. Abraham); Alopecia, nervosa et traumatica (Dr. Walsh); Dermatitis herpetiformis (Dr. Meachen), and other cases. The annual dinner will be held at 7.30 p.m. at Pagani's Restaurant, Great Portland Street, W.

Appointments.

Clarke, Cecil, M.D., B.S.Lond., Assistant to the Superintendent of the Laboratories at the Hospital for Consumption, Brompton, S.W.

Crisp, James Ellis, M.R.C.S., L.S.A., Medical Officer to the Scattered Homes by the Chippenham (Wilts) Board of Guardians.

Glynn, E. E., M.D.Cantab., M.R.C.S., M.R.C.P.Lond., George Holt Professor of Pathology in the University of Liverpool.

Pybus, Frederick, M.S., F.R.C.S., appointed Medical Referee under the Workmen's Compensation Act, 1906, for County Court Circuit, No. 1.

Randolph, William Henry, L.R.C.P.Lond., M.R.C.S., Medical Officer for the No. 2 District by the Dulverton (Somerset) Board of Guardians.

Robinson, W. E., M.D., B.Ch.Oxon., Visiting Anæsthetist to the Royal Waterloo Hospital for Children and Women.

Woolf, A. D., M.D. (Brux.), L.R.C.P., L.R.C.S. (Edin.), L.R.F.P. and S. (Glas.), Assistant Anæsthetist to the Prince of Wales' Hospital, Tottenham.

Vacancies.

County and City Asylum, Powick, Worcester.—Junior Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, washing, and attendance. Applications to Medical Superintendent.

Whitehaven and West Cumberland Infirmary.—Resident House Surgeon. Salary £120 a year, with board and lodging. Applications to Wm. H. Sands, Secretary.

West Derby Union.—Mill Road Infirmary, Liverpool.—Assistant Resident Medical Officer. Salry £125 per annum, with board, etc. Applications to Harris P. Cleaver, Clerk to the Guardians, Union Offices, Brougham Terrace, West Derby Road, Liverpool.

Borough of Hampstead.—Medical Officer of Health. Salary £600 per annum. Applications to Arthur P. Johnson, Town Clerk, Town Hall, Haverstock Hill, N.W.

Woolwich Tuberculosis Dispensary.—Assistant Medical Officer. Salary £225 per annum. Applications to Dr. Sidney Davies, Town Hall, Woolwich.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointment:—Jedburgh (Roxburgh).

House of Recovery and Fever Hospital, Dublin.—Junior Assistant Resident Medical Officer. Salary £50 per annum, and board. Applications to J. M. Day, Medical Superintendent. (See advert.)

Births.

Burstal.—On July 4th, at Cherwell, Staines, the wife of Edward Burstal, M.B., of a daughter.

Dottridge.—On July 4th, at Overton, Godalming, the wife of Cecil A. Dottridge, M.B., of a son.

Harmer.—On July 6th, at 45 Weymouth Street, W., to Mr. and Mrs. Douglas Harmer, a son.

Rawes.—On July 4th, at "The Lodge," Sarisbury Green, Hants, to Dr. and Mrs. Leslie Rawes, a daughter.

Thompson.—On June 26th, at Wrexham Lodge, Ealing, the wife of Major F. S. Corbett Thompson, I.M.S., of a son.

Tidy.—On July 4th, at 39 Devonshire Place, W., the wife of Henry Letheby Tidy, of a son.

Marriages.

Hutchinson—Knowles.—On July 2nd, at Huyton Parish Church, Lancelot Hutchinson, M.D., to Doris, only daughter of the late Herbert Knowles, M.D., M.R.C.S., of S. Helens, and of Mrs. Knowles, Hayton.

Renshaw—Taylor.—On July 4th, at St. Paul's Church, Kersal, Manchester, J. A. Knowles Renshaw, M.D., 11 St. John Street, Manchester, second son of Dr. and Mrs. Chas. J. Renshaw, Beech Hurst, Ashton-on-Mersey, to Amy, elder daughter of Mr. and Mrs. George Taylor, and niece of George H. Charlesworth, Claremont, Kersal.

Sankey—Saxby.—On July 2nd, at St. Nicolas, Abingdon, Richard Harvey Sankey, M.D., of Oxford, only son of Mr. and Mrs. Heurtley Sankey, to Audrey Mary, eldest daughter of Mr. and Mrs. George Saxby, of Twickenham House, Abingdon.

Wallace—Jackson.—On July 6th, at St. Marylebone Parish Church, London, Cuthbert Sidney Wallace, F.R.C.S., of 26 Upper Wimpole Street, youngest son of the Rev. John Wallace, to Florence Mildred, youngest daughter of Herbert Jackson, of 4 Sussex Place, Regent's Park.

Deaths.

Gilchrist.—On July 2nd, at Gairant, May, the beloved wife of A. W. Gilchrist, M.D., of Nice.

McKee.—On July 3rd, Alexander Baillie McKee, M.B., of 50 Shell Road, Lewisham, London, elder son of the late Rev. T. A. McKee, D.D., of Dublin.

Mosse.—On July 4th, at Oberland, Guernsey, Channel Isles, the Honble. Charles Benjamin Mosse, C.B., C.M.G., late Dy.-Surgeon-General A.M.D., and for nearly 25 years Superintending Medical Officer, Colonial Medical Dept., Jamaica, aged 82.

Spencer.—On July 5th, at Queen's Mansions, 54 Victoria Street, S.W., Elizabeth Gordon Lamond, wife of Surgeon-General Sir Lionel D. Spencer, K.C.B., M.D., K.H.M.

Stericker.—On July 1st, Frederick Walter Stericker, M.D, late R.N., eldest son of the late Frederick Stericker, aged 51.

DOCTOR'S RESIDENCE.

Gordon Square, London, W.C.—To be let, one of the best houses in this favourite square; seven bed-rooms, four excellent reception-rooms, and commodious offices.—Particulars of Messrs. Edwin Fox, Bousfield, Burnetts, and Baddeley, 99 Gresham Street, City.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, JULY 17, 1912. No. 3.

NOTES AND COMMENTS.

Scottish Politicians and the Act.

THE position of the medical profession in Scotland with regard to the National Insurance Act is on the whole satisfactory. In our last week's issue we hinted at sundry rifts within the lute, but their very method of revelation, namely, that of condemnation by resolution, showed that forearming was the first deliberate part of forewarning. Scotland is a land where political feeling runs high, and it cannot be expected that all members of the medical profession will be prepared at a moment's notice to place their profession behind their politics. That, at any rate, is the only construction we find ourselves able to place upon the actions of men about whose *bona fides* there is no room for doubt. We had hoped up to the last moment of going to press that a personal explanation would have reached us from those whose names have been brought forward in so pointed a manner by the resolutions, which were commented upon last week in these columns. It is to be regretted that the matter of the Insurance Act and compliance with the general wish of the majority of the profession was not made a test question before the last election of the Direct Representative upon the General Medical Council. The function of a Representative is to represent, and if he finds himself hopelessly at variance with nine-tenths (or more) of his constituents, there can be little doubt on the part of any man of ordinary sensitiveness in such things as to the next step to be taken. Until the much-to-be-desired personal explanation is forthcoming, however, it is premature to discuss that side of the question.

The Cost of the Wassermann Test.

THE cost of the application of the Wassermann test for syphilis is so great as to preclude its general use. In smaller hospitals, where the services of a well-equipped laboratory and a pathologist are not available, the honorary medical staff are seriously handicapped in their endeavour to give the patients under their care the advantages of skilled modern treatment. In some instances we have known medical men pay the cost of such laboratory tests out of their own pockets, but the practice, however creditable to the humanity and generosity of the medical men concerned, must, nevertheless, be obviously limited in practice. Yet the value and the occasional necessity of the Wassermann test in every branch of medical and surgical practice, if good results are to be obtained, may be accepted as a self-evident proposition. It is in the detection, the cure and the prevention of disease an element of vast economic importance to the community. It is to the public, then, that we must look for help in this matter. Why should not that philanthropy which is willing to provide ample funds for the investigation of cancer, and of so abstract a matter as radium-therapy, not found a Wassermann institute, to which the blood of any person could be sent for examination free of cost? Why not, forsooth, and why not—again—why not tackle syphilis?

Principles Before Office.

IN THE MEDICAL PRESS AND CIRCULAR for February 28, 1912, we commented in a leading article upon the position of lay boards with regard to the purely medical details of hospital management, with special reference to the case of the Renfrew and Clydebank Hospital. It will be remembered that Dr. W. Butchart, the then medical superintendent of the institution, had been practically forced to resign his position because he had been ordered by the board to carry out a certain mode of treatment for scarlet fever, in the efficacy of which he did not believe. As it was, the mortality at the hospital was exceptionally low and the cases did remarkably well. A certain section of the board, ignoring these obvious facts, allowed their parsimonious ideas to run away with their sense of justice or decorum, with the result that, after fifteen years of honourable service as medical superintendent, Dr. Butchart felt himself obliged to separate his connection with the hospital, rather than submit to seeing his patients subjected to what he considered an unjustifiable experiment. While sympathising with Dr. Butchart in the trying position in which he found himself, we were confident at the time that the wisdom of his action would be appreciated, not only by his colleagues in the profession, but also by the public. Subsequent events have proved the truth of our contention, for the other day Dr. Butchart was the recipient of a handsome silver casket, an illuminated address and a purse of sovereigns, at a crowded meeting of the burgh, in recognition of his sterling worth and high professional abilities. The testimonial especially mentioned the fact that during Dr. Butchart's tenure of office the mortality at the hospital was much below the average for the West of Scotland, while it assured him of the esteem in which he was held by the people of Clydebank, as well as of their undoubted faith in his professional judgment.

Lantern versus Wool Test for Colour-blindness.

DR. A. LYNCH, M.P., has done good service in asking the President of the Board of Trade in the House of Commons whether the Committee on Sight Tests have demonstrated the superiority of the lantern over the wool test for colour-blindness, and whether Dr. Edridge Green's lantern had been found satisfactory by the Admiralty. The answer was official and non-committal, but it is to be hoped that our Navy will ultimately adopt a scientific method for testing the colour-vision of would-be sailors. It is now over twenty years since Dr. Edridge Green, as adviser to the Board of Trade, pointed out the defects of the Holmgren wool test. That authority has published reports of specific instances in which men who passed the wool test perfectly were afterwards shown by the lantern test to be hopelessly colour-blind. It is clear, therefore, that to pass men on so defective a test as that of Holmgren is to run the risk of taking into the Navy men whose physical defect in sight would be a source of constant danger. It would be greatly to the advancement of scientific medicine, and it would be also in the economic interests of the community were there more Members of Parliament possessed of professional training and zeal such as those which characterise Dr. Lynch.

LEADING ARTICLES.

THE INSURANCE ACT AND THE MEDICAL PROFESSION.

Monday last, July 15th, witnessed the coming into operation of the National Insurance Act. The leading actor in the drama, the medical profession, was conspicuous only by absence, a situation that, for grotesque departure from precedent, was surely never surpassed even in the strange and shifting kaleidoscope of domestic politics. To play Hamlet without the Dane in this fashion is to attempt a feat worthy of the highest political genius—or temerity—and the result of a long tangle of negotiations leaves the issue, even at the eleventh hour, yet in the balance. The latest move on the part of the Chancellor of the Exchequer was to obtain a report from Sir William Plender, a well-known accountant, as to the incomes of medical men in Darlington, Darwen, Dundee, Norwich and St. Albans. The general result places the average medical income at 4s. 2d. per head of population, a figure that covered all medical and surgical attendance and (except in the case of Dundee) medicine. The *Daily News*, whose reasoning from figures is usually of Machiavellian subtlety, says, in its issue of July 13th, that Mr. Lloyd George offers the doctors 8s. 6d. per head. The sum is made up of 4s. 6d. capitation grant, 1s. 6d. for drugs and 2s. 6d. for extras. If that sum has been definitely proposed per head of insured persons under the Act, and the further conditions of free choice of doctors and adequate medical representation secured, it is difficult to see any reasonable ground for further differences between the Government and the medical profession. But surely there must be some little rift in the actuarial lute wherewith the *Daily News* statistician charms and convinces his many readers. On the 13th instant the Chancellor declared that he would not give an eleven shillings grant—an utterance which is less definite than that of the *Daily News*. The medical profession prefers to cling to certain conclusions which it has elaborated with much exercising of the spirit, a course to which it has been prompted by the belief that its material prosperity was grievously imperilled by the pressgang tactics of Mr. Lloyd George. It seems almost incredible that a serious politician of the front rank should calmly arrange to arrogate the services of a great professional body without having first carefully investigated the economics of the position from every point of view, and without having ascertained the views of the profession at first hand. Hence we have the diverting spectacle of a Cabinet Minister of first rank, within a few days of the coming into operation of an Act, conducting an actuarial investigation which should have been made at a preliminary stage of the proceedings. The matter has now well-nigh passed out of the stages of negotiation. The last Fabian tactic of Sir William Plender's inquiry has not advanced matters materially, although it has successfully postponed the day of final settlement. If a definite offer of 8s. 6d. *per caput* of insured persons is offered, should the medical profession not be at once put in possession of the fact? The *Daily News* is generally supposed to be more or less in the confidence of the Chancellor of the Exchequer. Will Mr. Lloyd George say "yes" or "no" to the assertion contained in its issue of July 13th to the effect that 8s. 6d. *per caput* of insured persons is offered to the medical profession? Failing the immediate announcement of some such definite sum, we repeat the advice we have given of late on various occasions in the columns of The Medical Press and Circular, namely, for every medical practitioner in the United Kingdom to join a public medical service organisation. Further, we advise medical men to take up an active campaign against the present Government, regardless of their personal polical views. The Government has flouted medical opinion, it has carried on negotiations which have been subtle, unconvincing and inconclusive, it has made appointments of medical men that have been received with universal abhorrence by the medical profession, and now, with the Act in operation, medical men still find their just and clearly-defined demands staved off with plausible sophistries and unmeaning generalities. The method that is likely to be most effectual as a means of self-defence is to assume the weapons of political aggression, and to convert the medical profession into a solid opposing army. The only way to meet this sort of injustice is, in our opinion, by organised political protest. There need be no question as to the ability of the Insurance Commissioners to pay the sum of 8s. 6d. per head, a point that was pretty conclusively shown by our correspondent, Dr. Macphee, of Glasgow, in our issue of July 10th. In conclusion, a passage may be quoted from that gentleman's most admirable communication:—"When all is said and done," he writes, "the main object of the National Insurance scheme is to raise the standard of the national health—to reduce sickness and death—and I would seriously point out to all concerned—Friendly Societies included—that cheap medical attendance means in most cases inefficient medical attendance. If medical men are not fairly treated, so as to enlist all the members of the profession on the side of the scheme, then the main object for which it was devised will assuredly be frustrated."

THE OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM AND THE ROYAL SOCIETY OF MEDICINE.

Of the existing special medical societies in London, the only one which has failed to become a unit of the Royal Society of Medicine is the Ophthalmological Society of the United Kingdom. All the other societies have fallen into line, have recognised the wisdom of the step, and are now happily profiting by this valuable scheme of amalgamation and co-operation. But for some reason the Ophthalmological have adopted a negative policy and have held aloof, for which no substantial explanation has ever been forthcoming. When, some years ago, the project was first brought under the notice of the members, absolute rejection was its fate. Then a lukewarm feeling in its favour led to the matter being subsequently reopened, but again with the result that those who desired the amalgamation were outvoted by those who did not. At length, after meandering about in the wilderness of refusal, during something less than the traditional period of forty years, a final agreement has been reached, by which the Society has virtually committed an act of suicide. Some short time ago the Council summoned a special meeting of the members, to be held on July 11th—last Thursday. The object of the meeting was expressly to discuss a resolution supported by the Council favouring the scheme of amalgamation, urging in support thereof the many cogent and unanswerable reasons which rendered the step expedient. To this resolution an amendment was subsequently issued to the members prior to the meeting; the amendment being to the effect that the Council be requested to consider the advisability of so altering the rules that all the meetings of the Society may be held each year during the course of one week, as is done by other National Ophthalmological Societies. At the meeting last week, which took place as arranged, this amendment was agreed to. But at the same time, it was understood that the members of the Society were left free to join an Ophthalmological Section of the Royal Society of Medicine, should one be formed. The inevitable has happened with that speed which characterises up-to-date organisations and enterprises full of movement and life. Two days ago the Council of the Royal Society of Medicine agreed to the formation of an Ophthalmological Section, and steps are already being taken to give effect to that decision. Thus the matter so far stands, and it is of interest to ask: How does it affect the Ophthalmological Society? The situation resolves itself naturally into one of the commonplace description of competition. On the one hand there will be an Ophthalmological Section, full of activity and life, rejoicing possibly in its new and attractive environment, grafted upon a parent stem having many other sturdy branches, all flourishing, and bringing forth fruit under the central stimulus; and on the other, a stunted Society, whose period of vitality is limited to one week in the year. It may be doubted whether such attributes would suffice to sustain the existence of a Society devoted to the advancement of so special a science as that of ophthalmology. An annual congress may be a good adjunct to a Society, but it can never be the sole crutch upon which a society, whatever its nature, could be supported. Moreover, what inducement does this congress offer to the members of the Ophthalmological Society of the United Kingdom to continue their membership? Viewed from the aspect of the lowest ground—that of subscribing to it—the inducement is rather in the other direction; for by joining the Royal Society of Medicine, the members will be able to credit themselves with their annual subscription to the Ophthalmological Society, besides having in hand the other valuable advantages which Fellowship of the Royal Society of Medicine confers. Nevertheless, we are prepared to concede the expediency of the idea of organising a British Ophthalmological Congress. The idea is distinctly a good one. Nothing of the kind in this country has hitherto been attempted, and it would be a step in the right direction to undertake the enterprise. But its organisation would necessarily have to be on different lines from those proposed, and the best method of carrying the scheme into effect would be by utilising to the full the facilities available after the formation of the Ophthalmological Section of the Royal Society of Medicine.

CURRENT TOPICS.

The Treatment of Tuberculosis under the National Insurance Act.

In a circular letter from the Local Government Board dated July 6th, 1912, *i.e.*, nine days before the National Insurance Act came into operation and sanatorium benefits began, it is stated that the Board trust that the services of the Medical Officers of Health will be available for the purpose of making arrangements with the Insurance Committees for the treatment of insured persons recommended for sanatorium benefit. It is earnestly to be hoped that the various county and borough councils have already prepared their schemes for this treatment and that there may be no lack of co-operation with the sanitary authorities with regard to the working of the County Scheme. According to section 16 (1) of the National Insurance Act, it is necessary that the approval of the Local Government Board should be given to any sanatorium, dispensary, or other institution 'in which insured persons are to be treated.' As regards domiciliary treatment of cases of tuberculosis under the National Insurance Act, the Board and the Insurance Commissioners concur in thinking it desirable that this should be carried out as far as practicable by general practitioners acting in consultation with the tuberculosis officers of the area, or other approved adviser, due regard being had to the importance of the hygienic conditions of the home in all cases. The Board wish again to direct attention to the paragraph in their circular letter of May 14th last as to the appointment of suitably qualified and experienced men for the senior appointments in connection with dispensaries and sanatoria, and in this connection they would draw attention to the recommendation on this part of the subject in the Interim Report of the Departmental Committee on Tuberculosis to the effect that such officers should preferably be not under the age of twenty-five and that they should have had at least six months' experience of resident appointments in a general hospital, as well as in an institution for the special treatment of tuberculosis.

An Appeal in Aid of Tropical Medicine.

A Committee has been recently formed at the request of the Secretary of State for the Colonies to raise funds for the extension and development of the work of the London School of Tropical Medicine. Mr. Austen Chamberlain is the Chairman, and in the course of his appeal it is stated that £100,000 is required to provide an adequate endowment fund, to make additions to the laboratories and buildings for the accommodation of the growing number of students, to provide for the prosecution of research, and to establish a small nursing home for civilians who cannot afford to procure for themselves the special medical and surgical treatment and nursing required in these special branches of disease. There should be little need to press the claims of this institution before the public, for the manner in which great and important discoveries, emanating from this school, have not only been the means of saving valuable lives, but have also literally revolutionised the conditions of existence in certain tropical regions, is now common knowledge. The warm interest always taken in the London School of Tropical Medicine by Mr. J. Chamberlain, under whose auspices it was founded in 1899, should suffice to stimulate the philanthropic instincts of every loyal British subject. Already over £15,000 has been collected. Subscriptions may be sent to the Lord Mayor's Fund, the Secretary of the London School of Tropical Medicine, Connaught Road, E., or Mr. Austen Chamberlain himself, who will preside at a meeting of the Committee to be held at the Foreign Office to-day, July 17th, at 4 o'clock.

The Sanatorium Benefit.

In the fight that is being made by the medical profession for proper conditions of service under the Insurance Act, it is essential that unanimity should be preserved. To do this we must be careful that we do not raise unnecessary grounds of quarrel. Up to the present our only ground of quarrel has been with the proposed administration of the medical benefit. The sanatorium benefit presents no obnoxious features, and if it is to prove at once useful to the public and acceptable to the medical profession, it is of the utmost importance that the schemes for its administration should be framed in accordance with medical opinion. The action of the State Insurance Committee of the British Medical Association in declaring war on the sanatorium benefit seems to us, therefore, a mistake both in tactics and in policy. It is likely to alienate the sympathy of the public, which up to the present has been with the profession. It is sure to create dissension in our own ranks. It will result in the starting on wrong lines of what will be one of the most important departments of the public health work in the country. We trust that the representative body of the Association, at its meeting next week, will reverse the policy of the State Sickness Insurance Committee, and see that our just quarrel is kept within its proper limits.

Larvicides and Malaria.

In the campaign against malaria, great reliance has been placed on the use of so-called larvicides, and in particular on kerosene oil. Nevertheless, in spite of arduous work, the results have been often disappointing. In a paper read recently before the Asiatic Society of Bengal, Surgeon-Captain F. F. MacCabe subjects the methods of the orthodox campaign to a severe criticism. In a number of experiments, performed some in the laboratory and some in the field, he found that kerosene had little action as a larvicide, but that it completely cleared pools of the fresh-water snail, which normally destroys many larvæ. Dr. MacCabe made experiments with various disinfectants, but the only preparation he found of practical use was a mixture of chloride of lime and common paraffin oil. This seemed to have a rapidly destructive effect on mosquito larvæ. More important than the use of any larvicide, however, is the clearing of waste water and the draining of pools. As an accessory to the use of paraffin and chloride of lime, he found an electric current of help. The current he employed was a low-tension current of two hundred and twenty volts.

Hospital Accommodation for the Dying.

A curious discussion has recently taken place at the Academy of Medicine in Paris with regard to an innovation which is likely to be introduced shortly into the new hospital at Lyons in the shape of separate rooms for patients who are in a hopeless condition. The idea of providing special apartments for moribund patients in general hospitals is utterly repugnant to public feeling in this country, for the small compensation of extra privacy would be immensely outweighed by the depressant effect that would be inevitably produced upon the other inmates by the knowledge that one of their number was being transferred to a place where all hope of life was presumably abandoned. The careful screening of the dying in a general ward of a hospital is done more in the interests of the other patients, so that those in the adjacent beds may be spared witnessing painful scenes. The added privacy thus secured is also a tribute to the feelings of the relatives and friends who are entitled to some consideration in their times of grief and distress. It is the greatest mistake in the world to associate any particular bed in the ward with a "bad case," as is sometimes involuntarily done by students and nurses, or to give expression to the absurd superstition that its occupant has "never been known to recover." A private room or ward for the reception of grave cases upon admission is a good thing where funds permit, but the provision of rooms whither patients are to be transferred as soon as their condition is adjudged hopeless is, in our opinion, cruel, unnecessary, and absolutely unjustifiable.

Inebriety and Art.

One of the penalties associated with the possession of the artistic temperament is an increased susceptibility to emotional stimuli. Indeed, it is difficult to conceive an individual having the sensitive organisation characteristic of this type who is not more or less profoundly affected by sense-impressions or psychical forces projecting themselves within his sphere of consciousness. It seems that some degree of nervous instability is the necessary accompaniment of all artists worthy of the name, *i.e.*, those whose work is stamped with the unmistakable brand of genius.

To such natures, especially if their power of self-control be not too strong, the temptation to have recourse to artificial stimuli in order to increase their productive power is very great. That these agencies may, and do, have such effects at first is well known, but the quality of the work speedily suffers until the hapless victim is driven to the use of abnormal or perverted stimuli in order to obtain any inspirations at all. The subject was ably dealt with at the last meeting of the Society for the Study of Inebriety, by Dr. T. B. Hyslop, who was of the opinion that many of the so-called "up-to-date" hysterical attempts to revolutionise art, music, and literature were due to over-indulgence in the sensuously beautiful and the consequent endeavour to stimulate the exhausted faculties by alchohol or some other drug. The higher the nervous organisation and the finer the intellectual or emotional temperament the less is the tolerance of stimuli of this nature.

The Medical Advisers of the Colonial Office

The announcement of the retirement of Sir Patrick Manson, M.D., K.C.M.G., F.R.S., from the post of Medical Adviser to the Colonial Office in London, which will take place next month, recalls one of the greatest triumphs of preventive and tropical medicine during the last century. His enunciation of the hypothesis, afterwards confirmed by Sir Ronald Ross, that the mosquito is the host of the malarial parasite during one stage of its existence may be said to have laid the groundwork of research in relation to the mode of transmission of certain tropical diseases. The medical profession will be especially gratified at the further mark of royal favour recently bestowed by the King upon one of its most distinguished members in the shape of his appointment to be a Knight Grand Cross of the Order of St. Michael and St. George. It has been found necessary to divide the duties hitherto discharged by Sir Patrick Manson, and the Secretary of State for the Colonies has appointed Sir J. Rose Bradford, M.D., K.C.M.G., F.R.S., to be Senior Medical Adviser, and Mr. C. W. Daniel, M.B., M.R.C.P., to be Junior Medical Adviser to the Colonial Office in London, while Mr. W. T. Prout, C.M.G., M.B., will be Medical Adviser in Liverpool. These appointments, which will take effect from the date of Sir Patrick Manson's retirement, will be welcomed by those who know anything about the high scientific attainments of their holders. A happier choice could hardly have been made, for in their new counsellors the Colonial Office has secured the aid of physicians of ripe judgment and practical experience in their respective spheres.

PERSONAL.

H.M. the King has been pleased to give directions for the appointment of Sir Patrick Manson, LL.D., M.D., F.R.S., K.C.M.G., Medical Officer to the Colonial Office, to be a Knight Grand Cross of the Order of St. Michael and St. George in recognition of his eminent services in connection with the investigation of the cause and cure of tropical disease.

Dr. A. J. Clark has been appointed Demonstrator of Pharmacology at King's College, London.

Dr. W. A. T. Lind, M.D.Melb., has been appointed Pathologist and Neurologist to the Department of Lunacy, Victoria.

Mr. E. Gerald Stanley, M.B., B.S.Lond., F.R.C.S.Eng., has been appointed Demonstrator of Anatomy at St. Bartholomew's Hospital.

Dr. A. S. Owen has been elected an Assistant Physician to the West London Hospital, Hammersmith.

Professor James Martin Beattie, M.D., M.A., of Sheffield, has been appointed to the chair of Bacteriology in the University of Liverpool.

Dr. Richard J. Reece, M.A., M.D., D.P.H., Medical Inspector, Local Government Board, has been appointed Assistant Medical Officer to the Board.

Dr. A. Goodman Levy, M.D., M.R.C.P., has been appointed Physician to Out-Patients at the City of London Hospital for Diseases of the Chest, Victoria Park.

A bed has been endowed in the Birmingham General Hospital in memory of the late Mr. F. Victor Milward, an Assistant Surgeon to the hospital, who died two years ago.

Professor Pavlov, the well-known physiologist, of the University of St. Petersburg, was the recipient last week of the honorary degree of D.Sc. of the University of Cambridge.

Mr. W. T. Prout, C.M.G., M.B., late Principal Medical Officer, Sierra Leone, has been appointed by the Secretary of State for the Colonies Medical Adviser to the Colonial Office in Liverpool.

Dr. Jas. Greig Soutar, Medical Superintendent of Barnwood Asylum, Gloucester, has been elected President of the Medico-Psychological Association of Great Britain and Ireland for the year ensuing.

Dr. J. S. Bolton has had the degree of D.Sc. in Physiology of the University of London conferred upon him for a thesis entitled "A Contribution to the Localisation of Cerebral Function based on the Clinico-Pathological Study of Mental Disease."

Mr. Charles A. Ballance, M.V.O., F.R.C.S., has been appointed to represent the Royal College of Surgeons of England on the occasion of the Ninth International Otological Congress to be held next month in the United States at Harvard University.

Dr. John Brierley Hughes, Secretary of the Stockport, Macclesfield, and East Cheshire Division of the British Medical Association, has been presented with a silver rose bowl on behalf of the members in recognition of his valuable services rendered during the past five years, more especially in connection with the Insurance Act.

Sir Rickman J. Godlee, Bart., was re-elected President of the Royal College of Surgeons of England at a meeting of the Council on Thursday last, when hearty congratulations were accorded him on the bestowal of a baronetcy. At the same meeting, Mr. Clinton Dent and Mr. G. H. Makins, C.B., were elected Vice-Presidents for the ensuing year.

Professor Edward Malins, M.D., F.R.C.P., has, we learn, resigned the Chair of Midwifery in the University of Birmingham and Mason College, which he has held since 1894, and has presented a sum of £1,000 to the university in recognition of his obligations as a citizen and of the position of the university in furthering the highest interests of intellectual and material progress.

From the presessional volume of papers to be read at the Ninth International Otological Congress at Boston, U.S.A., to be held on August 12th-17th, we see that England will be represented by Messrs. Chas. A. Ballance, A. H. Cheatle, Charles Heath, R. Lake, Urban Pritchard, H. Tilley, Walker Wood, and Macleod Yearsley, of London; and Mr. Adair-Dighton, of Liverpool.

A CLINICAL LECTURE
ON
THE TREATMENT OF DYSPEPSIA. (*a*)

By W. H. WILLCOX, M.D., F.R.C.P.,
Physician to Out-Patients, St. Mary's Hospital, Paddington.

[Specially Reported for this Journal.]

(*Concluded from page* 32.)

CHRONIC DYSPEPSIA.

In these cases the symptoms have usually been persistent for some time, and have generally resisted ordinary treatment. Careful examination will have been made on the lines indicated above, but in many cases some supplementary investigations are necessary before a definite diagnosis can be formed. In such cases an examination of the gastric contents after a test meal should be made.

Early in the morning a pint of very weak tea, containing a little milk and sugar if desired, should be taken by the patient, and with it a piece of buttered toast. After an hour the stomach should be emptied as completely as possible by the soft tube, no water being added. The quantity withdrawn should be measured, and afterwards analysed.

Inflation of the stomach may be effected by giving to the patient soda water to drink, or by the taking of the two halves of a Seidlitz powder separately. This enables the size and position of the stomach to be made out. The size and motor power of the stomach may be determined by the administration of 1 to 2 oz. of carbonate of bismuth given in milk, and X-ray examination should be made every hour after the administration for several hours. In a few cases the gastroscope has been used, but the passage of this instrument is not devoid of risk, and it will on most patients require an anæsthetic.

Chronic Gastritis.—This gives rise to symptoms of chronic dyspepsia, and no gross organic lesion of the stomach is present. The gastric contents show a diminution in the active hydrochloric acid and ferments. Free hydrochloric acid is usually absent, and the gastric ferments are diminished. In treating cases of this kind, careful attention should be paid to the condition of the mouth and teeth. If the symptoms are severe, rest in bed for about a fortnight is advisable, and during this period gastric lavage can be carried out daily. Citrated milk or peptonised milk may be given, 5 oz., every two hours for the first three days. Then junket, lightly boiled, or poached eggs, clear soups, or jellies may be given in addition. When the patient gets up, his diet should be carefully regulated, and only plain, easily digestible food allowed at first, such as fish, boiled chicken, tripe, sweetbreads, toast, rusks, thin milk pudding, etc.

Alcohol should be avoided, and smoking must be prohibited. As regards medical treatment, a mixture such as

Liq. strych., 3 m.
Acid hydrochlor. dil., 14 m.
Tinct. aurantii, ½ dr.
Glyc. pepsin, 1 dr.
Spt. chlorof., 10 m.
Aq., ad. 1 oz.
t.d.s., p.c.

may be given.

Where there is much gastric irritation, the bismuth mixture prescribed above for acute gastritis may be given, and to it, if necessary, may be added glycerine of carbolic acid, 10 m. General hygienic treatment, such as change, congenial exercise, etc., are of great value.

Hyperacidity.—In some cases, symptoms of chronic dyspepsia are associated with an excess of hydrochloric acid and ferments in the gastric contents. While hyperacidity may be a symptom of gastric and duodenal ulcer, it must be remembered that not infrequently it occurs in the absence of any gross organic lesion of the stomach. Rest, either in bed or on a couch, is advisable. The diet should be easily digestible, and citrated milk, or milk containing 1 dr. of bicarbonate of soda to the pint, should be freely given.

A mixture,

Bismuth carb., 10 gr.
Magnes. carb., 10 gr.
Sod. bicarb., 40 gr.
Aq. chlorof., add 1 oz.

should be given one hour after meals.

In some cases the taking of olive oil, a tablespoonful before meals, is of value. The patient should avoid spiced foods, condiments of all kinds, also soups and meat extracts.

Chronic Atonic Dilatation of the Stomach.—In this condition the gastric contents show diminution in active hydrochloric acid and in ferments. Otherwise, there is no marked change. Sometimes organic acids are present in small amounts. This condition is best treated by rest in bed for a few days; the stomach may be thoroughly washed out and emptied at the commencement, and then the patient fed with citrated milk to which beaten-up eggs are added. Horlick's Malted Milk, mixed with water, may be given alternately with the citrated milk. An ounce of liquid may be given every hour for the first 24 hours, and the quantity of liquid only gradually increased. When the stomach has contracted down, light, easily digestible solids may be given; but big meals must always be avoided. It is well to avoid taking liquids with the meals; these may be taken either an hour before meals or between meals.

Abdominal massage is of value, and a nerve tonic such as

Liq. strychnini, 4 m.
Tinct. card. co., ½ dr.
Acid hydrochlor. dil., 10 m.
Aq. chlorof., ad. 1 oz.
t.d.s., p.c.

may be given.

Change and attention to the diet and general health are essential if the recurrence of the symptoms is to be avoided.

Dilatation of the Stomach due to Pyloric Obstruction.—Usually in this condition the presence of mechanical obstruction is shown by the presence of peristalsis.

The nature of the mechanical obstruction, whether due to ulcer, or growth of the pylorus, or gastric displacement, is indicated by the analysis

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(*a*) Lecture delivered at the Medical Graduates' College and Polyclinic, June 3rd, 1912.

of the gastric contents. In this condition medicinal treatment on the lines of atonic dilatation of the stomach may be tried; but massage must be avoided, since frequently an organic lesion of the stomach is present. It will commonly be found that though the patient improves at first under treatment, yet when he gets on to a diet of solid food he speedily relapses. In such cases surgical treatment should be advised, since gastro-enterostomy is strongly indicated.

Congenital Hypotrophic Pyloric Stenosis.—The symptoms of this condition commence usually about the third week of life; they are characterised by the forcible ejection of the stomach contents, almost immediately after taking food, and by the presence of peristalsis and the palpable tumour of the pylorus. Gastric lavage should be done twice daily, and the child fed with albumen water and lactose, or citrated milk, or whey to which somatose may be added. If the loss of weight continues under the treatment, the question of surgical interference must be considered.

Pyloric Spasm in Children.—This gives rise to vomiting in early life, and often peristalsis is visible. No pyloric tumour can be felt, because there is no hypertrophy of the pylorus. Treatment on the above lines is usually followed by marked improvement.

Gastroptosis.—In this condition the gastric contents are usually normal, or may show a slight diminution in the active hydrochloric acid and gastric ferments. The gastroptosis is commonly part of a general enteroptosis. Careful regulation of the diet is necessary, so as to avoid dilatation of the stomach. Nourishing liquid food—*e.g.*, citrated milk, milk puddings, eggs and milk, Benger's Food, etc.—should form the basis of the dietary, and be given every two or three hours. Abdominal massage and faradic electricity will stimulate the abdominal muscles and increase their support. A special abdominal belt should be worn which will give support from below. If these remedies fail, surgical treatment should be resorted to. Eve's operation of suturing the lesser curvature of the stomach to the free border of the liver has given good results. In some cases, gastro-enterostomy may be necessary.

Gastric and Duodenal Ulcer.—The gastric con-may be found. The treatment of this condition should commence with absolute rest in bed. Local tents usually show an excess of hydrochloric acid and gastric ferments; occasionally a trace of blood applications in the epigastrium of poultices, antiphlogistine, ice, etc., may be used if the pain is severe. Where there has been frequent vomiting or hæmatemesis, it is advisable to withhold food by the mouth for four or five days, and to give rectal feeding every six hours; for example, nutrient enemata of

Somatose, ½ oz.
Glucose, 6 dr.
Normal saline, 10 oz
or,
Glucose, 6 dr.
Yolks of two eggs,
Salt, 8 gr.
Peptonised milk, 10 oz.

Probably, normal saline, 15 or 20 oz., given every eight hours, answers equally well. The mouth should be kept clean by an antiseptic mouth wash, and a few teaspoonfuls of hot water may be sipped if thirst is severe. After the period of rectal feeding, the diet advised by Lenhartz may be given. This consists of 8 oz. of milk mixed with one egg for the first 24 hours; then, daily, 4 oz. of milk and one egg are added until two pints of milk are given. Afterwards a little scraped raw meat can be given, and later boiled rice, pounded fish, or chicken are given, the eggs being reduced. It is an advantage to use citrated milk in the above dietary. In place of the Lenhartz diet, citrated milk or peptonised milk, to which has been added sodium bicarbonate 1 dr. to the pint, may be given; and to this may be added malted milk, Plasmon, or beaten-up eggs.

In cases of chronic ulceration, where the symptoms do not call for such a severe course of treatment as above, the patient should be put on a liquid diet; citrated milk, with eggs beaten up in it, Benger's Food, or custard may be given. About 5 oz. of liquid every two hours should be given, and, if tolerated, then milk puddings and pounded fish may be added.

A mixture of

Bismuth carb., 20 gr.
Magnes. carb., 10 gr.
Sod. bicarb., 40 gr.
Spt. chlorof., 10 m.
Aq. menth., ad. 1 oz.
t.d.s.

should be given.

In cases of gastric or duodenal ulcer, surgical treatment will be indicated:—

(1) In cases where there is definite pyloric obstruction.

(2) Where there have been repeated attacks of hæmatemesis.

(3) Where there is persistent pain of a severe type.

(4) Where the symptoms have been of long duration, so as to prevent the patient following his occupation, or leading a life of comparative comfort.

It is usual to try medical treatment first in the above class of cases; but if speedy and permanent relief is not effected, it is advisable that surgical treatment should be adopted. Gastro-enterostomy usually gives marked relief in such cases. It cannot be too strongly urged that the great majority of cases of gastric and duodenal ulcer get well, and remain well, after proper medical treatment and dietetic care.

Cases in which gastro-enterostomy is advised should be most carefully selected. In suitable cases there is no operation which is attended with more brilliant results, while in unsuitable cases no benefit will accrue, and the patient may very likely be worse.

Carcinoma of the Stomach.—This condition may be indicated by the symptoms, by the presence of a palpable tumour, and by the character of the gastric analysis. This will show absence of free hydrochloric acid; the active hydrochloric acid is almost always below .1 per cent. Organic acids may be high, especially in carcinoma of the pylorus. The ferment activity is reduced. Lactic acid and mucin are commonly present. This character of the gastric contents associated with persistent dyspepsia and a palpable tumour, make the diagnosis almost certain. The diagnosis having been made, the treatment usually resolves itself into palliative treatment where the patient is given light diet, such as peptonised milk, Benger's Food, light soups, jellies, etc. For the pain morphia should be given in doses of 1-10th of a grain every six hours. This may be conveniently given by the mouth.

A mixture of

Acid hydrochlor., 10 m.
Glyc. pepsin, 1 dr.
Tinct. card. co., 1 dr.
Aq. chlorof., 1 oz.
t.d.s., p.c.

may be given.

It is remarkable how little pain occurs in many cases, and how long morphia or opium preparations may be deferred. Often a little phenacetin will relieve the pain in the early stages. The patient should not be allowed to suffer pain, and, if necessary, hypodermic injections of morphia, or of morphia combined with atropin, should be given as often as required.

As regards surgical treatment, unfortunately, when the signs are such that the diagnosis of this disease is certain, usually, complete removal of the growth is impossible. In early cases removal of the growth may be attempted. When the case is at all advanced, in my experience, Laparotomy usually shortens life very considerably, and is attended by no advantage except the diversion of the patient's mind. Exception should be made to cases of pyloric carcinoma causing pyloric obstruction. Here, undoubtedly, gastro-enterostomy may relieve pain and distress, and prolong life.

The Treatment of other abdominal conditions giving rise to dyspepsia should be carried out in an appropriate manner. It is only proposed to refer to *Colitis,* which is almost invariably associated with dyspepsia, and is frequently complicated by gastric ulcer or hyperchlorhydria. These gastric symptoms require treatment on the line already indicated, and in addition the colitis will require active treatment.

Chronic Appendicitis.—This often gives rise to persistent dyspepsia and constipation. As soon as the condition is definitely recognised it may be cured by surgical treatment.

Functional Dyspepsia.

This has been left until last for consideration, because it should not be diagnosed until all possible organic causes for the symptoms have been carefully excluded. In this condition very persistent symptoms of dyspepsia are present, most of which are subjective. The gastric analysis usually shows a normal condition of the gastric contents, though in some cases the gastric secretion may be increased or diminished. In mild cases, change, freedom from business worries and anxieties, exercise, and congenial occupation, are beneficial, and a light nutritious diet may be given. In the more severe cases rest in bed is necessary, and a modified rest cure should be carried out. An examination of the gastric contents should be made, and any excessive secretion may be treated by a mixture of bismuth and alkali. A deficiency of secretion may be treated by hydrochloric acid and pepsin mixture. The patient should be given milk foods at regular intervals. Massage, both abdominal and general should be employed, and the application of faradic or galvanic electricity is often useful. In cases where hysteria is marked, a mixture containing ammoniated tincture of valerian with potassium bromide often does good. Many of these cases are associated with mucous colitis, which may require treatment by intestinal lavage, etc.

Cases of functional dyspepsia are extremely common, and are often the most difficult of all to treat. Sympathetic treatment on the lines indicated above usually does good, but as soon as possible the patient should be encouraged to take up some hobby or occupation, so that his mind is diverted from his internal digestive processes.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by M. Castaigne, M.D., Professor at the Faculty of Medicine of Paris; Physician to the Beaujon Hospital. Subject: "Digestive Uræmia Simulating Cancer of the Pylorus."*

ORIGINAL PAPERS.

ARTHRITIS DEFORMANS AND A PURIN-FREE DIET.

By J. S. Kellett Smith, F.R.C.S.Eng.

The polyarticular, painful form of arthritis deformans is surely one of the most cruel diseases to which the human frame is subject. Its worst feature is that it does not kill, but is capable of subjecting its victim to the extremities of pain and deformity without the hope of a speedy relief.

Text-books of a few years ago stated honestly, according to the lights of their day, that "arthritis deformans is an incurable disease." It still remains incurable to the extent that the anatomical destruction is beyond repair; but on the other hand it is now recognised that many cases—in addition to those of gonococcal, pneumococcal, and some other proven infections—are due either to the action of infective organisms or to the absorption of bacterial products, and vigorous treatment, with this fact as the guide, will often give surprisingly good results. Early diagnosis and early discovery of the sources of the mischief are the essentials of success, and any case or observation which will throw light upon the disease is worthy of report.

In many cases a probable origin is revealed upon physical examination, and amongst such may be mentioned carious teeth, pyorrhœa alveolaris, putrescent masses in tonsillar crypts, nasal catarrhs, frontal sinus and antral suppurations, adenoids, middle ear suppuration, ulcerated hæmorrhoids, suppuration along the urinary tract, tubal disease, vaginal and uterine discharges. The prevalence of these latter probably account for the greater frequency of arthritis deformans in women.

But sometimes the source is difficult to discover, and, when this happens, the alimentary canal must always be regarded with suspicion. Bacterial growth in the intestines is capable of becoming enormous: it has been calculated that as much as one-third the mass of dried fæces may consist of bacteria. Some cases of arthritis deformans give evidence of great putrefaction in the intestine, and good results have been reported in such by cutting down the amount of putrescible proteid in the food, or by feeding for a period on soured milk alone.

One other factor demands consideration. The purin bodies in foodstuffs appear to act upon some persons as powerful irritants of the intestinal mucous membrane. Experimentally they have been shown to do so when taken in large quantities, and it is justifiable to assume that people with unstable mucous membranes will re-act in the same way to small doses of purin which the normal person would assimilate with impunity. A mucous membrane which has become catarrhal is no longer efficient as a barrier. Hence the question of this *local* effect of the purins crops up in this connection as an important one, and it becomes advisable to know the amount of purin contained in the various common articles of diet.

The following analyses are taken from Dr. Hutchison's compiled tables, whilst the purin figures are from Walker Hall's work on the subject:—

	H_2O	Proteid	Fat	Carbo-hydrate	Ash	Purin grs. per lb.
Rabbit	66.8	21.4	9.7	—	1.1	6.3
Mutton	65.2	14.5	19.5	—	0.8	6.8
Veal	71.0	17.0	11.0	—	1.0	8.1
Pork	60.9	12.3	26.2	—	0.6	8.5
Beef	76.5	20.0	1.5	—	1.3	8.6
Turkey	60.3	23.4	15.0	—	1.2	8.8
Chicken	70.2	21.0	7.6	—	1.1	9.0
Steak	—	—	—	—	—	14.5
Liver	61.2	23.1	9.0	5.0	1.7	19.3

In the case of turkey and of chicken the analysis is of the dark and light meats taken together, the former being richer in fat and poorer in proteid than the latter.

The comparatively large amount of purin in liver is not unexpected: not only is the liver the seat of great tissue activity, but here also the oxidation of hypoxanthin and xanthin to uric acid takes place. Beef steak contains a larger proportion of muscle tissue to fat, etc., than the ordinary joint, and therefore gives a larger purin figure.

For the remainder it is to be noticed that they are much on the same level; the "heavier" meats (pork and veal) containing a little more than the "lighter" kinds and a little less than poultry.

The purins of muscle tissue (xanthin and hypoxanthin), being soluble in water, are found in large quantity in concentrated meat preparations. The percentage proportion of "extractives" in four largely-advertised beef teas was 24.14, 21.7, 31.79, and 39.60; in one beef jelly, containing much gelatine, 1.01; and in one beef extract, 40.56.

	H_2O	Proteid	Fat	Ash	Purin grs. per lb.
Cod...	82.6	16.5	0.4	1.2	4.0
Plaice	77.86	16.6	—	—	5.6
Halibut ...	75.4	18.6	5.2	1.0	7.1
Salmon ...	64.6	22.0	12.8	1.4	8.2

In this table the "rich" fishes show the highest purin content.

	H_2O	Proteid	Fat	Carbohydrate	Purin grs. per lb.
Onions	89.1	1.6	0.3	6.3	0.063
Potatoes ...	78.3	2.2	0.1	18.0	0.14
Asparagus ...	91.7	1.1	0.2	2.9	1.5
Pea Flour ...	10.21	27.98	1.97	56.93	2.54
Oatmeal ...	7.2	14.2	7.3	65.9	3.45
Beans	11.7	23.0	2.3	55.8	4.16
Lentils	11.7	23.2	2.0	58.4	4.16

In plants the products of tissue change, other than gases, are chiefly stored—and so excreted from the active regions—in the bark, husks, leaves, etc. Hence the purin content is low in relation to the proteid.

	H_2O	Proteid	Fat	Carbohydrate	Purin
Eggs	73.7	14.8	10.5	—	None
Milk	87.10	3.25	4.0	4.5	Negligible
Butter	13.5	Small quantity	82.0	Small quantity	,,
Cheese	33.2	29.4	30.7	—	,,
Fine Wheat Flour... ...	13.0	9.5	0.8	75.3	None
Rice (husk removed) ...	12.0	7.2	2.0	76.8	,,
*Tapioca ...	11.5	Practically none	—	87.5	,,
Cabbage ...	89.6	0.9	0.4	5.8	,,
Cauliflower ...	90.7	1.1	0.4	4.7	,,
Lettuce ...	94.1	0.7	0.4	2.6	,,
Sugar	—	—	—	—	,,

*Macaroni is also purin-free, and fruits and nuts may be regarded as permissible.

This is an important table since it indicates the constituents of a purin-free diet. Milk and its derivatives are practically purin-free, presenting only a minute trace derived from the leucocytes contained in the milk.

From these purin-free foods a surprising number of dishes can be prepared by a skilled cook. The green vegetables and salads provide the necessary "ballast," and are also valuable for their mineral salts, carbohydrates are abundant, and there is no difficulty over fat. The weak point is the fact that the proteid is derived from articles which are apt to pall, and in many cases to disagree if taken continuously. Eggs, for example, may prove indigestible when eaten frequently, and may give rise to very disagreeable sulphur compounds. The greasy taste of raw milk, which is repulsive to many people, may be mitigated by heating and flavouring with nutmeg or cinnamon, and the freshly-made cream and plain curd cheeses can be tolerated longer than the matured and flavoured kinds.

If difficulty arises in this respect the proteid quotient may be supplemented by commercial preparations, the best of which give a high nitrogenous content, easily digested and absorbed, and quite suitable for prolonged use.

As regards beverages, beers and stout contain an appreciable quantity of purin; wines are free, but have other constituents irritative to the intestinal mucous membrane; spirits are purin free.

Caffeïne, theïne, or methyltheobromine, is found in coffee-beans (½ per cent.), in tea (2 to 4 per cent.), in kola-nuts (2.5 per cent.), and in some other vegetable products.

Theobromine, which strongly resembles caffeïne in its properties, occurs in cocoa-beans.

The following is quoted in illustration of the application of the purin-free principle of diet to a case of arthritis deformans:—

A. J., æt. 37, presented himself with arthritis deformans of both knees, wrists, and the left index metacarpo-phalangeal joint. Perfectly healthy up to about a year ago when he began to suffer from a feeling of weakness, pain, and swelling in the knees, especially after prolonged exertion. At the present time the disease is well marked in the knees, he is obliged to use a stick and to mount stairs one step at a time.

Family history shows Bright's disease on the father's side. The one important thing in his previous personal history is the evidence of instability of his mucous membranes. He has been obliged to give up his moderate smoking owing to throat trouble, and has restricted his diet to simple foods, having found that rich dishes (stews, made entrées, pork, salmon, etc.), caused abdominal pain followed by mucous diarrhœa. He has continued, however, to take the usual plain meats. General habit rather constipated.

Strict examination (nose, throat, ears, urine, etc.), failed to reveal anything abnormal. It was therefore concluded that the source of infection lay in the intestinal mucous membrane.

Treatment:—Local.—Massage and movements of the knee joints, together with Ionic Medication with sodæ sal. for twelve applications.

General.—(1) *Strict purin-free diet.* (2) beta-naphthol (gr. 6) three times a day. (3) A small dose of $MgSO_4$, in a tumblerful of hot water, first thing each morning.

The improvement in three weeks was so marked that the knees were practically free from pain, swelling greatly diminished, and he was able to walk up and down stairs in the usual manner. The wrists were proportionately relieved.

Thence onwards the conditions were gradually somewhat relaxed—the beta-naphthol was given up, the $MgSO_4$ taken only when required, and he was allowed potatoes, cod, whiting, sole, fresh haddock, the fat part of bacon, and boiled mutton. *But these articles of low purin content were taken always in very limited quantity, and rather as a relish than as the main substance of a meal.* Gravies and meat soups were, of course, prohibited.

In six months he reported that his general health was excellent, that the particular food was no longer a trial, and that he doubted whether he would revert—even with permission—to heavy meats as the mainstay of his diet. As regards the affected joints, he had marked continuous progress to the good, and he was now following his usual busy life without restraint, and was *able to cycle and to dance freely.*

THE CLINICAL SIGNIFICANCE OF ACIDOSIS IN PREGNANCY.

By WALTER C. SWAYNE, M.D.

The occurrence of acidosis has for some time been recognised as a phenomenon connected with the special toxæmias of pregnancy, and in this paper an effort is made to show how its presence can be ascertained by tests which are not too complicated to be carried out in clinical practice, and how the diagnosis and treatment of the case may be influenced by its occurrence.

It should be explained before going any further that the methods described are not intended to produce absolutely accurate results from the point of view of the physiological chemist, nor is there any attempt made to deal with the affections mentioned from the point of view of the pathologist, or to advance any theories as to the ætiology of the disturbance of metabolism which leads to the production of acidosis, but simply to record the results of the investigation of a series of cases, and the suggestions as to the treatment of the causative condition which seem to be the result of the investigation.

Acidosis is used as a term signifying an alteration in the ammonia-urea nitrogen ratio in the urine, accompanied by the presence of acetone and diacetic and beta-oxybutyric acids.

The quantitative estimations used are not absolutely accurate, but are sufficiently so for clinical purposes, and the amount of inaccuracy (which is not great) when it occurs in the same case under such conditions—for example, as before and after delivery—does not affect the comparisons to any material extent. For the methods of quantitative estimation used I am indebted to Dr. Herapath and Dr. R. E. Thomas, late of the Bristol Royal Infirmary; and the actual estimations have been worked out by Dr. R. S. S. Statham, Resident Obstetric Officer to the Bristol Royal Infirmary, and confirmed, in many cases, by Professor Kent and Dr. Bywaters, of the Department of Physiology of the University of Bristol.

Leith Murray (1), in his paper on the "Toxæmias of Pregnancy," alludes to the occurrence of acidosis in cases of vomiting of pregnancy and in eclampsia, and states that these two forms of pregnancy toxæmia, while not necessarily due to the same toxin, are probably due to the same type of toxin. It is not, however, in this paper proposed to do more than call attention to Leith Murray's investigations, since these are more particularly concerned with the pathological conditions found, but rather to point out the clinical importance of the occurrence of acidosis.

Acidosis occurs in diabetes, in which its occurrence was first noted (A. R. Short), (2) and in the following other conditions: Starvation, periodic vomiting of children, delayed chloroform poisoning, severe vomiting of pregnancy, and the pregnancy toxæmia which terminates in eclampsia. Two of the conditions named are, as Leith Murray has shown, the result of a toxæmia especially occurring during pregnancy. To refer to some of these conditions in detail :—

Diabetes is accompanied by marked acidosis, and pregnancy not infrequently occurs in a woman suffering from this disease. Just as muscular exertion may precipitate an attack of diabetic coma due to the increase of the acidosis, so may the muscular strain of labour, and consequently labour in a diabetic woman should be looked upon as attended by a grave risk, and every possible precaution taken to render it as free from exertion as possible.

The administration of chloroform as an anæsthetic will produce an acidosis in a healthy subject (A. R. Short (3); Muskens and Frew) (4), and the sequence of events classed under the name of delayed chloroform poisoning is largely due to the acidosis. Obviously, therefore, the use of chloroform as an anæsthetic in cases of parturition in which the patient is known to be suffering from an acidosis is to be avoided, and a case is quoted below which gives an instance of its danger.

The occurrence of albuminuria in a pregnant woman is one of the signs of the presence of a pregnancy toxæmia, but neither the mere detection of the presence of albuminuria, nor the quantitative estimation of the albumen present is sufficient. If albumen is found, the daily output of urea should be estimated, as this is an important indication of the manner in which metabolism is being carried on, and in addition the presence or absence of an acidosis should be ascertained. A well-marked acidosis occurs in cases suffering from the vomiting of pregnancy (Whitridge Williams (5) Leith Murray) (6) in nearly all cases in which the vomiting is severe, and occasionally in cases in which the vomiting is only slight. Every such case of vomiting, whether severe or not, calls for the application of tests to ascertain the presence or absence of an acidosis. In one case (No. 4), in which the vomiting could not be called severe, a marked acidosis was preseint. In one case a patient was reported to be suffering from severe vomiting of pregnancy before her admission to hospital, and on account of this report the usual investigations for acidosis were carried out and its presence ascertained, Observation after admission showed that the vomiting was only slight, not more than once or twice daily. She did, however, suffer from profuse ptyalism. Treatment directed to the reduction of the acidosis not only did so, but was accompanied by the disappearance of the ptyalism. This rather suggests that ptyalism may be one of the expressions of a pregnancy toxæmia, and the case is mentioned in the hope that other observers may be able to produce evidence either in support or contradiction of this suggestion. It should be stated that this patient, in addition, presented a well-marked papillitis on examination of the fundus oculi. Several cases have been investigated to ascertain whether acidosis occurs in the case of pregnant women showing no pathological symptoms, but with results entirely negative. Several other cases have also been investigated to ascertain whether acidosis occurred in cases of albuminuria due to a primary nephritis in the non-pregnant. The results here were also negative. In one case (No. 6) the patient was known to have suffered from a chronic nephritis, and an acidosis was found. There is no reason why a pregnancy toxæmia should not occur in addition to a pre-existing chronic nephritis. In one case of post-partum eclampsia no diacetic acid was found, although there was a large disturbance of the urea-ammonia nitrogen ratio.

It seems that from the facts mentioned above, it may be inferred that acidosis occurring in a pregnant woman suffering from albuminuria indicates a pregnancy toxæmia, although to prove this conclusively the investigation of cases of albuminuria in pregnancy without acidosis is necessary. So far, this evidence is wanting, since all the cases of albuminuria investigated showed an acidosis. All, however, suffered from some well-marked symptoms which led them to seek advice. One patient who was admitted suffering from albuminuria with acidosis, responded to treatment to such an extent as to lead to the disappearance of the ammonia nitrogen, diacetic acid, and a rise of the daily urea output to near normal, but she was re-admitted to hospital some weeks later with a recurrence of the previous conditions, and in spite of treatment, actually did become eclamptic. But in the majority of cases treated, eclampsia did not supervene, although the acidosis persisted until after delivery. In all of the cases the acidosis disappeared within a comparatively few hours after delivery, so that pregnancy is undoubtedly the determining factor in producing the toxæmia, and its cessation leads also to the cessation of the toxic symptoms. In Leith Murray's paper it is suggested that the acidosis, in cases of pernicious vomiting, is due to the starvation produced by vomiting. (Starvation acidosis has been already referred to.) In some of the cases of albuminuria investigated, however, and in one case of the vomiting of pregnancy, the patients

No.	Vomiting.	Urine oz.	Alb.	Diacetic Acid or Acetone.	Grains Urea per Diem.	% Ammonia Nitrogen.	
1.	L. C., 1 para	32	0	+ +	230	17%	Water only.
		36			310	31%	
		42			200	6%	
		18			220	4%	Saline and Glucose.
		20				2.3%	Milk—discharged normal.
2.	F. P., 1 para		0	++ ++	?		Ammonia nitrogen could not be worked out on account of diarrhœa. Diacetic acid disappeared within 48 hours of emptying uterus.
3.	A. M., 2 para		0	++	?	?	Uterus emptied under $CHCL_3$ (twins). Coma 48 hours later; intravenous injection of sod. carb. uræmia and death 8 days later.
4.	—R., 1 para.		0	+ +	342	6%	Vomiting not sufficient to prevent taking food, and only occurred about 2-3 hours after meals. Glucose per rectum.
	Ptyalism.						
5.	L. D., 2 para		0	— —		9% 3%	Diet milk only. NH_3N fell to 3%. Ptyalism almost ceased; went out on 9th day.
	Albuminuria.						
6.	E. L., 6 para	22	+	+ +	120	6%	Glucose and saline *per rectum*, but NH_3–N increased in spite of treatment.
		39			270	13%	
		46			310	13·7%	
		22			240	*Partus*	
		25			160		
					130		
		50			310	12%	Fell quickly after miscarriage.
		27			280	10%	
		46			310	4%	(not induced).
7.	L. V., 1 para	20	+	+ +	148	7·5%	Water only.
		39			175	5%	Milk.
		21			130	11%	Milk and rusk.
		36			100	7·5%	Glucose *per rectum*.
		29			150	7·5%	,, by mouth.
		38			130	12%	,, ,, ,,
		32			90	11%	
		40			75	10%	
						Partus	
		35			150	5%	
		40			130	7·5%	Special diet.
		40			135	5%	,, ,,
8.	S. B.		+	+ +	not ascertained.		
9.	D. C., 1 para	16					
		10		+++ +++	65	15%	Starvation until 4th day.
		10					Glucose on 5th day and after.
		50	+	Trace +	290	5% (4th day.)	
		36		*Nil*	250	1.5% (7th day.)	Fish and milk on 7th day.
10.	F. K.	29	+	+ +	80	14%	Glucose and saline *per rectum*.
		23			50	18%	
		22				*Partus*	
		24			75	10%	
		29			80	8%	
		33					
		32			90	7%	Fell to normal on ordinary diet being resumed.
		33			120	5%	
11.	F. G., 3 para	35			120	16%	Water only.
		80	+	++	210	8%	Glucose and saline *per rectum*.
		74				*Partus*	
		85			130	6%	
		40			280	4%	Fish.

No.	Eclampsia.	Urine. oz.	Alb.	Diacetic Acid and Acetone.	Grains Urea. per Diem.	% Ammonia Nitrogen.	
12.	E. C., æt. 20 1 para.	13	+ + +	+	308	4.74%	13/6/09.
					On admission.		
		30					
		43			334		
					Ninth day.		
13.	R. M., æt. 19 1 para.	?	+ +				29/6/09. $CHCl_3$ given.
		97	+		540		30/6/09.
		63			400	12.9%	1/7/09.
		99			606	13.7%	2/7/09.
		71			466	13.5%	3/7/09.
14.	M. A. H.	5?	+		60?	5%	$CHCl_3$ given by mistake.
					105	$CHCl_3$	
		12			200	10%	
		46			240		
		70			210	13%	
						Two Fits	
		51			110	14%	
		50			170	*Partus*	
		60			110		
		50			160	4%	Saline only.
		30			190	2.5%	
		19					
		40			220	3.5%	
		52					
15.	L. B., æt. 31				150	17%	Starvation for three days.
						4.7%	
			+ +	+		8%	Rose to 8% on milk.
						Partus	
						8.5%	
						4%	
						2.5%	Special diet.
16.	D. C., 1 para	81	+	+ +	216	14%	Water only.
						Five Fits	
		25			35	28%	
						Partus	
		93			310	7%	Saline and glucose.
	(See also No. 9)	135			300	7%	
		?		0 0		15%	
						Cystitis.	
17. to 22.	Normal pregnancy.	No acidosis.					
23. to 30.	Albuminuria in the non-pregnant			No acidosis.			

were receiving no food by the mouth whatever, but injections of glucose and saline solution per rectum only. This treatment did not, however, materially affect the acidosis. In spite of this treatment being continued after delivery, and no food given by the mouth, the acidosis disappeared almost entirely, so that it would appear that the occurrence of acidosis is not wholly due to starvation in these cases. In one case a primigravida suffering from vomiting, which was not of a severity to prevent her taking food, and, as a matter of fact, only came on just before meals, was found to have diacetic acid in the urine and an increase of ammonia nitrogen, with diminished urea output. The acidosis, however, in this case was not severe, and the percentage (6 per cent.) of ammonia nitrogen not high. It seems fair to infer that in this case the small amount of vomiting present did not lead to starvation, and that the occurrence of acidosis should be attributed to a slight pregnancy toxæmia.

DIAGNOSIS.

The extent of the acidosis in a case of vomiting should give some indication as to whether the cause of the vomiting is a toxæmia of pregnancy or due to come accidental complication causing vomiting in a pregnant woman. In albuminuria, acidosis points to a pregnancy toxæmia rather than a primary nephritis.

USE OF CHLOROFORM.

The following instance shows the danger of administering chloroform to a patient with acidosis. A patient suffered from vomiting of such severity as to necessitate the termination of pregnancy. This was done under chloroform, the presence or absence of acidosis not having been ascertained. Within 48 hours the patient became comatose and suppression of urine occurred. The coma was recovered from after an intravenous injection of sodium bicarbonate, but the patient died a week later from uræmia. Albuminuria had not been proved to be present at any period before the termination of pregnancy, and the fact that diacetic acid was present in the urine was not ascertained in sufficient time to prevent the administration of chloroform as the anæsthetic. In this case the cause of coma seemed almost certainly to be the rise of the acidosis due to chloroform, which, unfortunately, was the anæsthetic used in emptying the uterus. In one case in the table (No. 14) chloroform was given inadvertently in the absence of the Resident Obstetric Officer. The acidosis rose markedly after this.

At the Bristol Royal Infirmary the disuse of chloroform as an anæsthetic has been followed by a marked improvement in the mortality rate of cases of eclampsia. It seems highly probable that many of the deaths which occurred in previous series when chloroform was used as the anæsthetic were due to coma as the result of the acidosis produced by chloroform.

Chloroform is no longer used as an anæsthetic in any case of eclampsia or in any case of pregnancy where acidosis is present. Cases of pregnancy toxæmia are treated by the administration of glucose and saline by the rectum. If looked upon as pre-eclamptic, the diet is limited absolutely to milk, and if the general symptoms present are at all severe, by restriction to water only. The cases of vomiting are also treated in the same way, food by the mouth being excluded, but in either case a marked rise in the acidosis is looked upon as an indication for more drastic treatment, such as emptying the uterus.

Prognosis.

A marked rise of the ammonia nitrogen should be considered as an indication for the termination of the pregnancy in cases of severe vomiting and also in cases of albuminuria, provided that it cannot be accounted for in a way to be presently mentioned.

Tests and Methods of Estimation.

The first step is to test the urine for diacetic acid. This is a simple matter, merely needing the addition to three cubic centimetres of urine of a few drops of liq. ferri perchlor., when a deep red colour, which disappears on heating, is positive evidence of its presence. The tests for acetone and beta-oxybutyric acid are not essential, since the presence of these substances is almost a necessary corollary of the presence of diacetic acid. If diacetic acid is found the urea-ammonia nitrogen ratio should be worked out.

The following are the methods of estimation :—The total urea excretion is found by the hypobromite method. The total excretion in grains per diem multiplied by 0.0303 gives the number of grams of nitrogen passed as urea. To find the nitrogen passed as ammonia 25 c.c. of urine are shaken up with about 2 ozs. of solution of potassium oxalate (strength 15 gr. to the ounce) to clear the urine and precipitate calcium salts. The solution is neutralised; 10 c.c. of 40 per cent. formalin are neutralised. These two are shaken together. The formalin combines with the ammonia bases of the diacetic and beta-oxybutyric acid salts, forming urotropin, and the acids are set free in solution. The solution is then titrated against a decinormal solution of caustic soda; then the number of cubic centimetres of caustic soda multiplied by the number of ounces of urine passed in 24 hours, multiplied by 0.0016 gives amount of ammonia nitrogen in grammes, and from this the percentage of ammonia nitrogen in the urea nitrogen and the ammonia nitrogen combined can be easily worked out.

Sources of Error.

One patient developed an attack of cystitis with ammoniacal urine and enormous apparent increase of ammonia nitrogen. It is unnecessary to do more than indicate this complication as a possible source of error. Also if the analysis is made from a 24 hours' specimen, a certain amount of decomposition of the urea may have occurred in the course of 24 hours. In a comparison between the pre- and post-partum condition this error would be common to both.

The conclusions to be drawn may be briefly recited as follows :—

(1) Administration of chloroform to a patient with acidosis should be avoided, and chloroform should not be used for patients suffering from eclampsia.

(2) An increasing acidosis should be looked upon as an additional indication for terminating pregnancy in cases either of albuminuria or severe vomiting.

(3) To the ordinary treatment of these conditions should be added measures directed to the correction of the acidosis.

With reference to the table of cases, many of the investigations are incomplete owing to the difficulty in obtaining an uncontaminated 24 hours' specimen in every case. In each case in which the uterus was emptied, either naturally or artificially, that occurrence is indicated by *Partus*. The occurrence of convulsions is also indicated by *Fits*.

References.

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(4) Muskens Frew, "Proc. of Royal Soc. of Med." March, 1912.
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SUBMUCOUS RESECTION OF THE NASAL SEPTUM: AN ANALYSIS OF 130 CASES.

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Concerning the general question of the utility and safety of the submucous resection of a deviated nasal septum in properly selected cases there can be no dispute. This paper deals only with certain details in regard to the operation and its results.

Indications for Operation.—The operation is, of course, most frequently performed for the relief of nasal obstruction arising from deflections, outgrowths, or spurs of the septum. Ninety-one of my cases were operated on for this reason.

In addition to nasal incompetence sufficiently disturbing to lead the patient to seek relief from this disability, the operation may be necessary in cases where the secondary effects of the nasal obstruction are more striking than their initial cause. Seventeen of my cases fall into this group. Seven of these were cases of chronic laryngeal catarrh, more or less severe, all of which were materially benefited by the operation. In one case suffering from laryngeal tuberculosis the restoration of nasal patency by the operation was followed by a surprisingly good effect upon the laryngeal disease. Four were cases of chronic catarrhal deafness, two of which were improved by the operation, while two received no benefit. Three patients were operated on for the removal of the annoyance of "dropping mucus" in the back of the throat; one was cured, and the other remained as before. One case of anosmia was operated on with a negative result.

We are generally warned to abstain from the septal operation in cases of atrophic rhinitis, and I admit that this teaching is, as a rule, sound. But when the atrophic disease is found affecting only one side—the widely open side—of a nose with a deflected septum it may be worth while to depart from the rule. At all events, in the solitary case of this kind in which I performed the operation the atrophic disease rapidly got well.

There are other indications for the operation besides obstruction, less common, no doubt, but, when they are present, not any less cogent.

In eight of my cases a deviated septum was straightened in order to permit free access to the antrum, the ethmoidal, or the sphenoidal region, so that a polypus-bearing area might be efficiently curetted, or drainage provided for the discharging cavities. The frequency with which sinus suppuration and polypus formation are found on the stenosed side of an asymmetrical nose suggests a causal connection between the deflection and the disease, which, of itself, is, perhaps, sufficient justification for the operation. In none of these cases did the presence of sinus suppuration induce septic infection of the septal wound area. A rare indication for the operation existed in one case where a septal deflection hindered the surgical removal of a congenital occlusion of a posterior naris. It may be remembered in this connection that recourse to septal resection as the first step in a more extended surgical procedure has recently been had by Hirsch, of Vienna, in selecting the septum as the route of approach to the region of the pituitary body inside the cranium.

Turning to the removal of possible causes of reflex irritation by septal resection, I find eleven cases, six of which were cases of asthma. Of these one obtained complete relief from his attacks, a relief which still continues, two years after his operation; one remained free of asthma for eight months and then relapsed, though the attacks were less severe; two reported themselves "improved" by the operation; and in two it has done no good whatever.

Three cases were operated on for headache; two were cured and one remained unaffected.

Two cases were operated on for paroxysmal rhinorrhœa, and both were greatly improved.

It is, perhaps, necessary to say that in all these cases of presumably reflex irritation the condition of the septum was sufficiently abnormal to suggest that circumstance as a likely starting-point of the reflex irritation.

In two cases the septum was resected for quite extraordinary reasons. In one, a boy, aged ten, there was extreme deviation coupled with extensive adhesions between the septum and the inferior turbinals on both sides. The nose showed a peculiar stunting in its growth, affecting chiefly the cartilaginous portion of the external nose. In the belief that this maldevelopment was due to the bridling action of the adhesions upon the normal growth of the septal cartilage, I performed submucous resection and divided the adhesions. So far, however, the operation has not been followed by any improvement in the shape of the nose.

In the second case, the patient, a young lady, was annoyed by a persistent whistling sound proceeding from the nose. It originated in a narrow chink between a deviated septum and an enlarged middle turbinal, and was, of course, cured by the operation.

There is one variety of nasal obstruction for which submucous resection avails little or nothing, namely, in the pinched or collaterally compressed nose associated with the "Gothic" palate. In one case of this kind treated by submucous resection no benefit whatever resulted, and even complete resection of the septum with the intentional formation of a large perforation, to which I resorted to render the interior of the nose more roomy, failed to provide the patient with a useful nose.

The Operation.

All the cases were operated on according to the principles of Killian.

Anæsthesia.—Eighty-two cases were operated on under general and forty-eight under local anæthesia. With increasing practice in the *technique* I find I am using local anæsthesia more and more and general anæsthesia less. At the same time the inevitable discomforts attendant upon any operation under local anæsthesia always renders it unsuitable for sensitive people. In ordinary cases, however, a hypodermic injection of morphine (gr. $\frac{1}{4}$) or scopolamine and morphine (gr. $\frac{1}{100}$ and gr. $\frac{1}{8}$ to $\frac{1}{4}$) will soothe these discomforts and facilitate matters both for the patient and for the surgeon.

Whether the patient is conscious or unconscious the recumbent position is the most convenient. But the head and shoulders should be raised, otherwise there is a tendency in operating to deviate upwards away from the base of the septum. By so doing I twice inadvertently left behind large basal spurs.

In operating under cocaine with the patient sitting up, syncope interrupted progress five or six times; twice the patient became sick and vomited, and on one occasion the cocaine poisoning was so severe that the operation had to be abandoned. Vomiting during the operation is likely to lead to infection of the wound, and its occurrence, whether with local or general anæsthesia, is therefore objectionable.

These risks can be minimised by operating under local anæsthesia upon a recumbent patient. It is advisable, however, to insert the cocaine-soaked tampons before the patient lies down, so as to lessen the likelihood of some of the solution passing into the pharynx and being swallowed.

I have recently been using Freer's plan of applying cocaine crystals to the area of operation, and am rather pleased with it.

Asepsis.—Sepsis after submucous resection of the septum may manifest itself in several different ways. The commonest is follicular tonsillitis, a sequela which is due to carelessness in technique, and is avoidable.

Acute rhinitis is another common septic accident. One of my cases developed membranous rhinitis from infection with the pneumococcus, and was left with a perforation in the septum, due, I think, to the action of the organism. In another case of post-operative rhinitis the *Bacillus capsulatus mucosus* was, according to Dr. Wyatt Wingrave, the responsible agent—after the operator. In two of my cases, nasal sepsis following the operation apparently led to ethmoidal suppuration. In none, however, did the septic infection give rise to any anxiety.

In order to avoid these tedious complications, the lips, chin, cheeks, the outside of the nose, and, above all, the vestibule, should be surgically cleansed before operation. The interior of the nose, however, should not be treated in this way, even when there is already sinus suppuration present. The field of operation should be isolated by covering mouth, lips, and nose with sterilised gauze.

Some Points in Operative Technique.—Every operator evolves his own minutiæ, and I have no intention of describing in detail all my own particular devices. I may be permitted, however, to mention one or two points.

In the raising of the muco-perichondrium, a crucial point is reached when we pass from the cartilaginous to the bony section of the anterior septum, especially when there is a sharp-pointed spur or a deep gutter or recess to be negotiated. The reason is that the subperichondrial space is not continuous with the sub-periosteal space. The bone is completely enclosed in periosteum, and the penetration of the periosteal sheath from the sub-perichondrial space, especially when it is thick and tough, presents some little difficulty. The quickest and easiest method is to lay aside the elevator, and to cut through the fibrous barrier with a sharp knife. If the edge of the knife is turned towards the bone, button-holing of the flap will be avoided. The judicious use of the sharp knife at any stage is, indeed, one of the secrets of success in the operation.

There is no need to dwell upon the host of elevators, forceps, and gouges that have been devised for the operation, every specialist worthy of the name having invented his own. But I should like to draw attention to two points. First, when forceps are used to remove the vomerine plate at the back of the septum, it is advisable, I think, to cut clean through the bone without any twisting, rocking, or wrenching. Otherwise, we may produce a fissuring fracture, the range of the extensions of which we can neither foretell nor determine. Secondly, only so much of the cartilage and bone should be removed as is necessary to relieve obstruction and pressure, or to provide space for subsequent manipulations. I am quite sure that an artistically symmetrical and mathematically straight septum is no advantage. Rather the reverse, indeed, for by rendering the nasal passages too roomy it may substitute one evil for another, and transfer the patient from the troubles of nasal obstruction with its hypertrophies, to those of nasal spaciousness with its crusts and atrophies. In this respect, indeed, each case must be treated on its own merits, the operator forming a picture in his own mind as to how much or how little of the septal cartilage and bone ought to be removed.

Perforations and Button-holes.—In the submucous resection of the nasal septum, button-holing is a misfortune and perforation a disaster. It is true that many a man is going about the country to-day who is quite unaware of the perforation in the septum, and there is therefore a tendency to look upon perforations as of no consequence. All the same, no rhinologist can pretend to himself that he is pleased when a perforation results from this operation, expressly devised as it is to avoid such an occurrence. Moreover, it is questionable whether perforations are invariably the innocent and harmless conditions we hope them to be. At the same time, if an obstruction cannot be removed without making a perforation, then I suppose it is better to make the perforation. With experience, however, it is astonishing how even the apparently inevitable can be avoided. In these 130 cases I have sixteen perforations, most of them quite small, and most of them in my early cases.

Perforations are not always produced at the operation. There can be no doubt that extensive bruising, brusque handling of the flaps, or prolonged pressure from a too lengthy operation, especially when combined with sepsis, may set up sloughing and a perforation which surprises the operator when his patient presents himself for inspection a week or two after the operation. For this reason, therefore, other things being equal, the most successful operator is he who combines celerity with gentleness and ease of manipulation.

Button-holes.—We make button-holes oftener than our onlookers imagine. They do not necessarily lead to perforation, and thus they are generally disregarded. But they ought not to be; for the edges of a button-hole may gape and flap; granulations may sprout up around it; and in the reactionary swelling after the operation adhesions may form which will give rise to trouble at a later date. Apart from synechiæ, button-holes mean the ultimate presence of an area of non-ciliated scar-tissue and the likelihood of crust-formation.

Difficulties.—Apart from everyday difficulties like sharp spurs, deep gutters, traumatic deviations with adhesions, and so forth, one one occasion I encountered a septal cartilage with a considerable fenestra. Fortunately, the condition was recognised in time, and a perforation was avoided.

In those cases in which the so-called "columnar cartilage" is displaced into one vestibule, the main septal deviation lying behind, the removal of the whole cartilage—vestibular and nasal portions—is open to the risk of withdrawing most of the support from the point of the nose. A device to which my attention was drawn by Dr. Dundas Grant enables us to avoid this danger. It consists in making an incision over the dislocated cartilage, and removing it, and then making another incision further back than the first in order to resect the more posterior part of the septum. Between the two incisions a shore or prop of cartilage is left which supports the tip and columella of the nose, and, as it occupies the middle line, it is non-obstructive.

Another common difficulty is met with where the deviation is so extreme that the bend in the cartilage extends up to the bridge of the nose. In such cases our operation voyages between Scylla and Charybdis. If we remove the cartilage close up under the bridge we risk external deformity. If we leave it, the flap depending from it occupies much the same position as the septum itself did before the operation.

Troublesome Sequelæ.—Two results of operating, even when the operation itself has been quite successful, may give rise to subsequent trouble. One is turbinal engorgement, which, by inducing nasal obstruction, may render the patient doubtful of receiving the benefits he has been promised. Generally speaking, simple treatment or the use of the cautery will bring about cure of this condition. But there are several cases in my list in which the trouble persisted for a year or eighteen months. I assume that this disturbance is due to local shock, if not infection, upsetting the nasal vaso-motor system. The other objectionable after-result is an obstinate tendency to the formation of small fine crusts—a dry rhinitis—which has affected some six or eight of my cases; all of them, however, finally recovered. This sequel may be ascribed to the operation depressing the vitality of the ciliated cells of the septal mucous membrane. The lesson to be learned from these occurrences is, I take it, that the operation should be speedily performed, and with as little traumatism as possible. Plugging after the operation, for example—an unfortunate necessity—should be done with gauze dipped in sterile vaseline so as to minimise the risk of damage to the superficial cells of the mucosa.

In two cases it was found that the mould of mucoperiosteum covering a basal spur still retained its original bulging position, in spite of the fact that the bone it had enclosed had been completely cleared away by means of a chisel at the operation. That is to say, that the sheath of soft tissues, being stiff and rather resistant, did not spontaneously flatten down after the bone inside it had been removed. The true state of matters was, however, disclosed on probing the prominence, and the remedy was simple.

Age.—My youngest patient was ten years old, the oldest sixty-one. But the majority were males between eighteen and twenty-five years of age. It is not yet settled whether operation may be performed in early childhood without interfering with the subsequent growth of the nose. But Mr. Westmacott and others who have paid particular attention to the point have not reported any postponed deformity following an operation performed in childhood.

Results.—The greater the nasal obstruction the better is the patient pleased with the operation. We may note here that after the straightening of a deflected septum and the consequent opening-up of the nasal chambers to the air currents the voice becomes richer and more resonant—a grateful result, particularly in patients who are actors, singers or public speakers.

In conclusion, let me remind you that the operation necessarily impairs the strength of the skeleton of the nose, and that a blow, even a slight blow, upon it may flatten the organ beyond recognition and beyond remedy. For this reason, boxing, football, wrestling, etc., should be avoided by people who have had the septal resection performed unless they wear some kind of nose-guard. That there have been cases in which the operation has been followed by spontaneous flattening of the end of the nose is perfectly true, and it is possible to imagine circumstances in which such an event would be inevitable, but these circumstances must be rare.

In this paper I have necessarily dwelt chiefly upon certain unpleasant and disturbing events which occasionally attend upon the operation, but it would be wrong to let the impression get abroad that such mishaps are common. It is not so. In suitable cases there is, perhaps, no operation in surgery where the patient risks so little to gain so much.

OPERATING THEATRES.

TEMPERANCE HOSPITAL.

APPENDICECTOMY FOR APPENDICULAR GASTRALGIA.—MR. PATERSON operated on a woman who had been admitted into the hospital giving a history of having suffered from indigestion and a heavy feeling after food accompanied by flatulence for the last five years. About four years previous to admission she became ill, had pain coming on immediately after food and lasting until she vomited, which occurrence usually took place about 15 minutes after a meal. After vomiting the pain was better until the next meal. This attack lasted four months, and the patient gradually got better and was well for twelve months with the exception of indigestion, with which she was constantly troubled. The woman had a second similar attack, then was well for two years. The patient had a third attack one year before admission to the Temperance Hospital, when she went into another hospital for two months and was treated with gastric lavage. During the attacks the pain was often so severe that it doubled her up.

The patient remained on milk diet, and later was only able to keep down soda and milk, and even that gave her pain. During the fourth attack she was admitted under the care of Mr. Paterson's colleague, Dr. Soltau Fenwick. On admission the patient was suffering from constant vomiting, which improved with gastric lavage. She left hospital, and was well for two weeks. She was then re-admitted. At this time the vomiting was so severe that patient had to be fed per rectum and had gastric lavage. The vomiting usually occurred twice daily.

She referred the pain to the epigastrium, and said it went through to the left shoulder. After medical treatment the pain was less severe, but it still came on soon after taking food. The case was diagnosed as one of appendicular gastralgia. An analysis of the stomach contents gave the following result:—Total chlorides, 0.306; free HCl, 0.003; protein chlorides, 0.222; mineral chlorides, 0.080; total acidity, 52.

On opening the abdomen, the stomach was found to be large. There was nothing abnormal in stomach, duodenum or gall-bladder. The appendix was discovered to be acutely kinked near its extremity by its mesentery. Appendicectomy was performed. The jejunum was kinked by a long ligament of Treitz, which was divided. The appendix measured 5½ inches in length, and contained three oval concretions, each of which measured three-eighths of an inch in length. The mucosa at the site of the concretions was ulcerated.

Mr. Paterson pointed out that there were three points of interest in the history of the case—(1) the chronicity of the symptoms; (2) the periodicity of the symptoms; (3) the severity of the vomiting. In some respects the symptoms were suggestive of gastric ulcer. He regarded gastric ulcer as an uncommon disease. The supposed symptoms were often present, but the lesion was elsewhere than in the stomach, usually in the appendix. In this case the character of the pain and the gastric analysis suggested appendicular disease. The character and severity of the vomiting, however, was quite unlike that usually associated either with gastric ulcer or with appendicular disease. Except when there is pyloric stenosis, vomiting is not a marked feature of gastric ulcer. In this case there was no evidence clinically of pyloric stenosis, and at the operation the pylorus was found to be perfectly patent and normal. In appendicular gastralgia vomiting often occurs, but not in such large amounts as in this instance. The operation had revealed the cause of these severe attacks of vomiting. He had no doubt that they were directly due to the long ligament of Treitz which caused kinking of the jejunum, and so led to obstruction to the normal flow of the intestinal contents.

It was remarkable with what fidelity the supposed symptoms of gastric or duodenal ulcer might be mimicked by lesions in other parts of the abdomen. Chronic appendicular disease, gall-bladder disease, kinks of the ileum, and stricture obstruction of the transverse colon gave rise to symptoms which might be readily mistaken for those of a gastric or duodenal lesion. As a rule a careful examination as to the detailed history of the case would suffice to distinguish these conditions.

The patient made an uninterrupted recovery.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section of Obstetrics and Gynæcology.

Meeting held July 4th, 1912.

The President, Dr. Amand Routh, in the Chair.

Dr. W. Blair Bell, of Liverpool, read a short communication on

THE PATHOLOGY OF UTERINE CASTS PASSED DURING MENSTRUATION.

The author showed specimens (1) of blood casts, which consisted of blood that had clotted in the uterine cavity and become moulded to the shape of that cavity, and (2) of endometrial casts, both thick and thin. These all showed a distinct decidual reaction in the stroma.

The pathology of the former (blood casts) was explained as being due to the fact that the endometrium failed to extract the fibrin ferment, either because the hæmorrhage was too profuse or too rapid. The pathology of the latter (endometrial casts) was stated to be due to the fact that there is extensive menstrual decidual reaction, which renders the endometrium much denser than usual. Consequently the blood which cannot break through into the uterine cavity strips up the membrane, either in its superficial parts or throughout its whole depth.

Dr. Blair Bell read a short communication on the sequel to a case (described at a previous meeting) of bilateral carcinomatous sarcomata of the ovaries. The patient, who is now dead, developed recurrences in the omentum, which, on section, were found to be carcinomatous in nature. This was considered to be conclusive proof that the original tumours consisted both of carcinoma and sarcoma.

Dr. E. Tenison Collins, of Cardiff, read a paper on

DOUBLE RUPTURED ECTOPIC GESTATION.

Cases of simultaneous double ectopic pregnancies are so uncommon that the author thought the specimen shown would be of interest to the section. Mrs. B., æt. 33, was sent down to the King Edward VII. Hospital at Cardiff late on Saturday night, April 7th, 1912, by Dr. Thomas, of Bargoed, who had diagnosed the case as one of ruptured tubal gestation. The patient had had four children, the last 2½ years ago, and two miscarriages, the last being four years ago. The last menstrual period was on February 3rd, or eight weeks before admission. About the middle of March she fell over a five-foot wall in her garden, and three days later was seized with pain in the left side, and the abdomen began to swell. Six days before admission she had slight vaginal hæmorrhage with more pain, and went to bed. Nothing suggesting a decidual cast was passed. On admission the patient was very anæmic, pulse 110, respiration 28, but no marked signs of collapse. There was dulness over the lower abdomen, and on vaginal examination the uterus was fixed in a somewhat solid mass.

On April 8th the abdomen was opened and a ruptured pregnant tube on the left side was found and removed. On examining the right appendages, to Dr. Collins's surprise another ruptured tube was found with a small fœtus outside it, and attached by a cord, which broke during removal. After removing the blood clot, the abdomen was filled with hot saline solution and then closed. Professor Emrys Roberts examined the specimens and reported as follows:—

Left Tube.—6½ cm. long, 3 cm. diameter in centre. Tube showed rupture in middle third. End sealed with blood clots. Microscope shows fœtal villi in blood clot removed with it and kept distinct. From left side an amniotic sac 5½ cm. in diameter, but no trace of fœtus. Estimated period, seven weeks.

Right Tube.—8 cm. long, 4½ cm. diameter. At outer third ruptured along anterior and upper margin. Well marked amniotic sac with umbilical cord attached. Fœtus 4 cm. long found extruded in blood clot.

The patient made an uninterrupted recovery, and left the hospital on the twentieth day.

The President gave his annual address on the work of the section during the year, in the course of which he discussed the bearing of the maternity clauses of the National Insurance Act on the teaching of clinical midwifery.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

Meeting held on Thursday, July 11th, 1912.

The President, Mr. J. B. Lawford, in the chair.

Mr. W. H. Jessop demonstrated Professor Gullstrand's Ophthalmoscope.

The President said it was a wonderful piece of machinery, and afforded a beautiful view, and, with monocular vision, gave a high magnification. The disadvantage was that it almost required a hand-cart for its transference from place to place.

Mr. Treacher Collins showed a case in which an intra-dural tumour of the optic nerve was removed with retention of the eyeball five-and-a-half years ago. The case, he said, showed the value of retaining the eyeball; there was good movement here, and it was altogether better than an artificial eye. It also showed that some tumours were not very malignant in character. Though he did not get all the tumour away, there had been no recurrence. He had been able to get the tumour away without cutting through the bone. The pupil was now gradually dilating.

Mr. W. G. Laws showed a case of detachment of the retina, with cyst-like protrusion. There was no suspicion of cysticircus.

Mr. P. C. Bardsley showed an instrument which he called a "sclerotome," the object of which was to do a trephine operation in one stage. With this instrument there was no danger of losing the trephine disc within the anterior chamber on the completion of trephining.

Mr. Charles Wray said the instrument was liable to get out of order, especially if the knife were inserted with a rocking movement.

A paper was read by Messrs. Brooksbank James and Stroud Hosford on

Operative Treatment of Glaucoma.

Reference was made to a note in the Transactions of the Society of October, 1909, in which was described by Mr. James a method of operating upon all cases of glaucoma by cutting through the sclera from without, after having turned down a preliminary conjunctival flap to cover over the linear wound. Since then the operation had been somewhat elaborated by turning out a piece of sclera by the following method. The conjunctiva having been made anæsthetic, and a few drops of adrenalin solution instilled, a large conjunctival flap was turned downwards to the corneal margin. All further bleeding was now stopped by adrenalin. An incision was next made at the limbus, concentric with the corneal margin, by cutting with the edge of the Graefe knife near its tip, so that the lips of the wound were perpendicular. The paring was proceeded with until a fair depth of wound had been attained. A small puncture was then made, and the aqueous allowed to evacuate itself very slowly. A blunt-pointed Stilling knife was now inserted into this opening, and the wound enlarged throughout its extent. A moderately large iridectomy was then made in the usual way. One then proceeded to turn out a piece of sclera from the upper lip or the angles of the wound, endeavouring to ensure that some of the lining membrane was attached to its under surface. This was laid flat on the surface of the adjoining sclera, and held in position by the conjunctival flap being stroked over its surface. The special points in the operation were (1) the fact that the edges of the scleral incision were perpendicular, not slanting as made by the Graefe or the keratome. (2) It would be noticed that the iris fell backwards much more readily than in an ordinary iridectomy, and did not require the introduction of another instrument into the eyeball to replace it. (3) The scleral flap could be cut by one of two methods. In some of the cases this was done by means of a punch. This, however was somewhat uncertain, and occasionally punched a piece of sclera clean out, which was not desirable. (4) Another method was to turn outwards by means of scissors or knife a strip from one or both angles of the wound. It this plan were adopted, it was better to outline the strip by marking out its limits almost through the whole thickness of the sclera prior to opening the anterior chamber, as the relaxed state of the tissues when the aqueous had escaped, rendered the proceeding more difficult. Mr. Hosford said he had carried the method out in all his cases of glaucoma except one, and that he did on the periphery of the iris. Whatever method was employed, there was a predilection on the part of the sclera to close up. Ten out of 38 cases so treated closed up. Of the 38, 28 healed by first intention, and 8 of the remaining 10 healed secondarily. The operation was simple.

SPECIAL REPORTS.

NATIONAL MEDICAL UNION.

A large and enthusiastic general meeting of the National Medical Union was held on Thursday, the 4th inst., at the Onward Buildings, Deansgate, Manchester. Mr. G. A. Wright, the President of the Union, occupied the chair. Numerous letters of regret were read from members who were unable to attend, all expressing their admiration for the work the Union had accomplished. The report of the General Committee, which had been circulated to the members, was taken as read, and the resolutions arising therefrom were debated. At the desire of the meeting the order of these resolutions was altered, and the future activities of the Union were then considered.

Dr. Garrard, of Salford, Dr. Bell, of Bradford (Yorks), and others, spoke in such laudatory terms of the magnificent stand taken by the Union, in guarding the interests of the profession and in getting the British Medical Association to take up the firmer attitude which it has recently adopted, that it was unanimously resolved to carry on the militant work of the Union in watching the interests of the profession, and in strengthening the British Medical Association in its determined opposition to the National Insurance Act, as at present framed. It was remarked that there was a great and distinct need of the Union in the present crisis. Country members were glad to feel that, in a large industrial centre, there was an independent body of men looking after their interests, who could meet at once to consider any emergency which might arise.

The meeting agreed that Dr. J. E. O'Sullivan, of Liverpool, should be recommended as the third Representative of Lancashire and Cheshire on the Council of the British Medical Association. It was stated that he was a general practitioner, and a firm supporter of the policy of the Union. In the recent election he made a splendid fight, and was a good "runner-up." He is undoubtedly the best candidate in the field, and the members present pledged themselves by a resolution to do all in their power to secure his election.

The third resolution was carried unanimously:—"That the medical members of the Advisory Committee should at once resign their positions, as it was both useless and undignified to continue in office." It was pointed out in this connection that the *pourparlers* with the Chancellor of the Exchequer displayed his complete ignorance of medical practice, and that the negotiations were quite illusory.

The fifth resolution was carried with acclamation:—"This Union considers the action of the Chancellor of the Exchequer, in suggesting an inquisitorial investigation into the books of private practitioners, is a piece of unparalleled impertinence, and calls on all members of the Union to refuse to have their books examined by any servant of the Government."

Another resolution which was passed expressed the conviction that it was anomalous that Medical Officers of Health should be asked, or consent to allow themselves, to be elected on Local Insurance Committees. In this connection it was mentioned that at a meeting of Medical Officers of Health, held in London recently, it was proposed by Mr. Smith Whitaker that these Officers, with the aid of assistants, should work the Act. They refused to entertain any such proposal.

Dr. Reynolds thanked the members of the Union for their support in the recent Council election, and stated that he would not give way one iota in his opposition to the Act as it stands, and would unremittingly carry out the determined wishes of the profession.

In view of the recent utterances of the Chancellor of the Exchequer, and other members of the Government, this meeting strongly indicates to the Government, and to the public generally, the determined attitude of the medical profession. It is quite firm in its decision to take no part in the working of the National Insurance Act until it is amended in accordance with its first demands, and for the benefit of the people whom it is supposed to serve. It is pointed out in the Report presented to the meeting that a money payment in lieu of medical benefits is not an adequate return for the promises contained in the Act; and that the Government will break their contract with the insured if they pursue this policy. It therefore remains with the employers of labour, and the insured, to deal with a Government who have made promises which it is impossible for them to fulfil. The question for them to settle before paying is—can the Government give them any reasonable prospect that the medical benefits promised will be forthcoming? If not, threats of compulsion are useless—the deadlock has come!

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, July 13th, 1912.

NEURALGIC PAINS OF PHTHISIS.

SIMPLE subcutaneous injections of boiled water prove very efficacious in the intercostal pains (stitch in the side) of consumptive patients. The neuralgia ceases after half an hour and the patient is relieved for several days. The quantity of liquid need not exceed one or two syringes. These pains generally derive from patches of dry pleurisy.

For the last four years Dr. Paillard has employed these injections of sterilised water in divers neuralgias, and especially in those of consumptives, with invariable success. He always injected the water *loco dolenti*.

SCIATICA.

Sciatica, as is well known, is a most rebellious affection, resisting frequently every possible treatment: linaments, blisters, actual cautery, electricity, massage, etc., not to speak of internal treatment by quinine, aspirin, salicylate of soda, opium, etc.

It is thus we hail with pleasure any new formula that guarantees some success and we hasten to employ it "while it cures"!

In any case Dr. Turach pretends to cure sciatica nine times out of ten by the following injection:—

Antipyrine, 10.
Cocain, 0.15.
Water, 10.

Inject deeply, *loco dolenti*, one syringe every day or every two or three days, according to the intensity of the pain. These injections are well borne.

The total number of injections does not exceed eight or ten.

LEUCOPLASIA.

Leucoplasia of the mouth or tongue has been diversely treated by solutions of salicylic acid, bichromate of potash, chromic acid, lactic acid, etc.

Dr. Averinos prefers a preparation of sulphate of copper:

Sulphate of copper, 2 gr.
Glycerine, 10 gr.
Water, 10 gr.

The parts should be well dried before touching the patches with a plug of cotton steeped in this solution. The operation is repeated every day for twenty days after which the applications are suspended for ten days and then renewed.

At the beginning the solution should be diluted by one-half so as not to irritate the mucous membrane by the caustic.

OZENA.

Ozena being proved to be of microbic origin, the treatment should be naturally antiseptic.

Monosulphide of sodium, 10 grms.
Glycerine, 50.
Water, 150.

A teaspoonful in a quart of boiling water for irrigation; a teaspoonful of chloride of sodium should be added to the solution to render it isotonic.

Aristol, 0.50.
Menthol, 0.05.
Essence of geranium, 1 drop.
Essence of vervaine, 11 drops.
Vaseline, 20 grms.

A small quantity is introduced into the narines morning and evening.

Iodide of sodium, 15 grms.
Arseniate of soda, 0.15.
Water, 300 grms.

A tablespoonful at each repast (2)

Iodine, 1 grm.
Iodide of potassium, 1 grm.
Glycerine, 40 grms.
Essence of verbena, 11 drops.
Essence of geranium, 11 drops.
Water, 10 grms.

Paint the mucous membrane, after local anæsthesia every two days with this solution.

GERMANY.

Berlin, July 13th, 1912

AT the Gesellschaft der Charité Aerzte, Hr. Eckert spoke on the occurrence of

LATE NECROSES AFTER TREATMENT BY SALVARSAN.

He showed two children in whom, after salvarsan treatment, marked necroses had developed. The first child was a premature one that was admitted into hospital very much under weight. There were spots on the thighs, the stools were decomposed, green, and a suspicion of syphilis was confirmed by the Wassermann test. The child got the first salvarsan injection on March 22nd; 0.05 dissolved in a c.cm of fluid were injected into a vein of the head. The injection was extremely well borne, but on the following day sugar was noticed in the urine. A second injection was made on April 13th. On this occasion, 0.04 salvarsan, dissolved in two c.cm. of fluid, were injected. This was not borne so well as the first injection. Vomiting followed, the temperature rose to 37.8, with sugar again in the urine. Two days afterwards, on the distal side of the point of injection—in a vein of the skull—and reaching to the lobe of the ear, there was redness, with swelling. Tenderness on pressure on the part, a feeling of heat. On the day following the inflamed part was very different from the rest; the distal part beyond the point of injection had become necrosed. The healing process went on well, and it was hoped the child would not suffer permanent injury from the treatment. The second child, two years old, was admitted for obstinate chronic weeping eczema; the heart was not sound; the Wassermann test confirmed a suspicion of syphilis. The child received the first injection (0.15 salvarsan in 4 c.cm. of fluid) on March 13th. On the 20th there was a mild urticaria, possibly due to the salvarsan; but one so often met with urticaria in exudative complaints. The second injection of 0.1 in 2 c.cm. of fluid was made on April 4 into the left cubital vein. It was also well borne, the child appeared quite well, left its bed and was lively. Three weeks later petechial hæmorrhages were seen on the dorsal surfaces of both feet, which soon increased in size until they were almost the size of a penny piece. The skin over the part was swollen, red, and tender to the touch. The child was out of sorts, with the temperature raised to 38. On May 2nd similar appearances came into both ankles; at midday there were similar symmetrical hæmorrhages on the middle phalanges of the second and third fingers of both hands. Here the hæmorrhages only reached the size of pin-points.

The cases were not shown for the purpose of discrediting the treatment in any way, as in Heubner's klinik they had always striven to make it useful in children's cases. The cases had been brought forward, therefore, in order that the causes of the disturbances might be discovered. He would now discuss the possibility of an explanation of the untoward occurrences.

(1) In both children two injections had been made within about three weeks. The second child had already undergone a course of arsenical treatment in the form of subcutaneous injections of sodium cacodylate. Possibly these might have been not without some influence.

(2) The injections had been made with the salvarsan dissolved in but a small quantity of fluid, and he pointed out that the long period of three weeks between the last injection and the onset of the hæmorrhage was not in favour of any causal connection between the two.

(3) The injections themselves were carried out in a manner quite free from objection. None of the solution could have got into the tissues around the veins.

(4) For an explanation of the necrosis another factor was necessary, and this would lie perhaps in injury of the wall of the vein.

(5) For both cases he could claim that there was no bacterial infection.

(6) As regarded both cases there could not be the least suspicion of embolic origin.

Hr. Heubner thought he was in a position to offer an explanation of the remarkable occurrences, considering arsenic to be a vascular poison. Hr. Heubner, jun., had shown that certain substances —gold, silver, antimony, and arsenical preparations—acted as poisons to the walls of blood-vessels, and specifically damaged their contractile elements. Here it would not be difficult to understand the effects of arsenic in such cases. We knew, as Hr. Blumenthal had told them, that arsenic very quickly entered the blood current. Depôts of arsenic were formed in the tissues, and especially in the liver. What combination of arsenic was thus deposited was not known. It was possible that one form of arsenic and albumen combination was more poisonous than another. As explaining the occurrences in the two cases brought forward only the action of arsenic as a capillary poison could come into consideration. If this were so the form and late appearance of the necrosis would be explained.

Hr. Heubner thought from experiments made by his son with gold, that there was a direct poisoning of the capillaries, in consequence of which the surrounding tissues were no longer nourished, and so became gangrenous.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Edinburgh University Graduation Ceremonial.—In the M'Ewan Hall, on July 12, the degree of M.D. was conferred on 45 candidates, and the degrees of M.B., Ch.B., on 123 candidates. The usual gold medals, scholarships, and prizes were also awarded. After the ceremony of capping was concluded, Professor Alexis Thomson delivered an address to the new graduates. He said that up to that stage they had followed a beaten track; they had done as they were told—more or less; now they were their own masters. As promoter it was his privilege to offer unsolicited advice, and he had to apologise for the first instalment being of a negative order. These may be described as a series of

Don'ts :—

Don't be in a hurry to decide on your future line of work.

Don't let yourself be tempted to accept an undesirable appointment, although there may be a salary attached to it. Doctors on the whole should beware of salaries. They are usually inadequate.

Don't marry until you have settled down to some definite line of work. An early, premature marriage, he added, is apt to limit the field of selection of work.

The first positive advice he had to give, was to obtain a hospital residency for six or twelve months. There was considerable risk, if they embarked at once on practice without post-graduate work, of their continuing to be satisfied with the knowledge and the outfit they now possessed. The associations of hospital work tended also to broad-mindedness and diminished the tendency to the development of fads, the pursuit of which was eminently out of place in a doctor. He suggested that when they did go into practice they should be chary of adopting extreme views on debatable questions—such, for instance, as what is the most appropriate diet for a community, or should indulgence in tobacco, or in alcohol, be abolished or encouraged. Doctors were, on the whole, too ready to give advice, whether they knew anything on the subject or not; it was one reason for the almost universal success of Scottish doctors, especially in England, that they were more reticent, and therefore got the credit of knowing more than they did. Living, as we did, in a democratic age, we deplored the fact that nine-tenths of the national sickness was due to ignorance or folly. Preventable disease was pure waste. Unfortunately, the exigencies of our political system were such that, although the supreme importance of the national health was recognised, there was no minister or department of public health to advise the Government in framing legislation. Hence measures, such as the National Insurance Act, of which the principle was unimpeachable, contained provisions detrimental to the moral and material interests of the profession, and indirectly thereby to the public. He would digress a moment to remind them of the dual personality of the doctor. Their training, up to now, had made them individualists, self-reliant, with the aid of books and instruments, to fight disease. But they would not be a month in practice without realising that there was another side to the doctor's life—his relation to the State and the public health. The individualist came quickly up against sociological questions, against laws affecting him as a practitioner in the framing of which he had not a word to say. He thought that in the last year of their studies they should have some instruction on that aspect of their future careers. Fortunately, there was a body which ten years ago formed a branch department of its purely medical and scientific activity devoted to medical politics—the British Medical Association. In recent years, he might say months, this medico-political department had been the only means of expressing the organised advice of the profession on legislation, and it was his duty towards those who were girding themselves for their life-long struggle with disease to advise them to add membership of the association to their armamentarium. Let them also, in their calling, remember the golden rule. So-called medical etiquette was to do to others—both their patients and fellow doctors—as they would desire to be done by.

National Insurance Act.—The Edinburgh and Leith division of the British Medical Association have unanimously decided to instruct their representatives at the general meeting to support the motion to break off negotiations with the Government, as no material concession has been made by the Chancellor since February last to the demands of the Association.

BELFAST.

Belfast Milk Supply.—The Local Government Board inquiry with reference to the application of the Belfast Corporation for an order authorising them to exercise powers of inspection of dairies outside the borough, from which milk is supplied within the borough, concluded last week. Various rural district councils were represented, and it was contended on their behalf that the introduction of another inspecting authority would only lead to confusion in the country, and that a great deal of the contamination of milk was caused in the railway stations. The Town Solicitor, in reply, urged that powers were wanted for inspection only, not prosecution. The consumer of the milk was most directly interested in the supply, and he contended that the Corporation represented the consumers in applying for the order. He believed that the evidence showed that there had been considerable laxity in carrying out the provisions of the Cowsheds Order.

THE LOCAL MEDICAL COMMITTEE.—During the past few weeks an immense amount of solid work has been done in connection with the formation and organisation of the Local Medical Committee in Belfast. A most satisfactory feature of the work is that it is being done by the men who will be most affected by the Insurance Act, and not being left to the officers of the local societies, who are generally young hospital men aspiring to be consultants. The enthusiasm among the general practitioners is very marked, and the number of those who have signed the undertaking promising loyalty to the profession grows daily. There are about 220 practitioners in the city, of whom 185 have already signed. Several have promised to sign, several are absent from home through illness, etc., and only three have actually refused to sign. Even these three protest that they have no intention of acting as blacklegs. A general meeting of the profession will be held on the evening of July 17th to consider further steps.

NORTH DOWN CORONERSHIP.—Dr. Samuel Wallace, of Lisbane, has been appointed coroner in the room of the late Dr. R. C. Parke, of Newtownards. Dr. Wallace graduated M.D., M.Ch. in 1883 in the Royal University of Ireland, and is very popular in the district.

LINDSAY MEDICAL GOLF CUP.—The competition for this cup was recently played on the excellent links of the Royal County Down Club at Newcastle, co. Down, by kind permission of the council. Mr. A. B. Mitchell, of Belfast, entertained the competitors to lunch and tea. Dr. Rankin becomes the holder for the present year, Dr. F. C. Smyth being the runner-up.

MCQUITTY MEMORIAL SCHOLARSHIP AT THE ROYAL VICTORIA HOSPITAL.—After the death of Dr. W. B. McQuitty some of his patients, friends, and colleagues raised a sum of money for a memorial to perpetuate his memory. This was handed over to the Board of Management of the Royal Victoria Hospital to found a prize for proficiency in practical work. The first award has recently been made, and Mr. H. P. Malcolm has the honour of being the first McQuitty Scholar. The amount of the scholarship is £30.

DR. CECIL SHAW.—Dr. Shaw's friends will be glad to know that he has recovered from his recent prolonged and severe illness. He hopes to resume work at once, and we join with his friends in hoping that he may soon recover the ground he has lost, and that he may be fit for his duties for many years to come. Dr. Shaw has always taken the greatest interest in the training of the medical student, and in the prosperity of the medical school, and his advice and assistance have been much missed.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

ON THE IMPORTANCE OF TEACHING PEOPLE TO BE SICK.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The Insurance Act will be of immense advantage to the medical profession. Why? Because it will educate people into being ill.

Nothing is more short-sighted than opposition towards it. It is true that it may, for the first few years, lessen the incomes of some men, but after an interval it will immensely increase the amount of money spent in medicine

Glance for a second at the sister professions. Does any man suppose for a moment that justice prevails most where there are most lawyers employed? One goes to law, as he imagines, to get justice; but one really goes because he is of litigious instincts, or because it is the custom, or because one's opponent has recourse to law. If the lawyers were offered a capitation fee to defend the interests of their clients, when called in, they would eagerly take it. They know that having the free service of a lawyer would greatly increase the desire to go to law, and that once the people learned the habit of litigation immense fees would be forthcoming to prominent men.

Consider the Highland crofter, the Irish peasant, and the London City man. At the age of five years the expectation of life of each is almost equal. It will make no notable difference to the life tables if the London man spends £100 a day in doctors—he will surely live as long as the countryman, but from the point of view of the profession what a difference there is!

Probably during a long life the average direct contribution of the Irish or Scotch peasant towards their bit of medicine is one halfpenny for Epsom salts per annum. It may be that the dispensary doctor takes a glance at him during his last illness, but that is about all.

Your city man lives no longer, but he means more to the profession. He is always eating too much, and scarcely a week of his life elapses but he sees some specialist or other. Every season he takes the cure at Marienbad, Vichy, Spa or Wiesbaden. He is a good mark for a hundred guinea operation on his appendix, for a £50 operation on his gall-bladder, for a £25 Wassermann reaction, and a sixty guinea course of salvarsan. Sooner or later he comes under treatment for neurasthenia, and runs the gamut of electrical treatment, mud baths and opotherapy.

First thing in the morning when he opens his eyes, is to take a glass of Hunyadi Water. He then takes a carbonic acid bath and a few lithia tablets. He scrubs his gums with Odol, sterilises his face with carbolic soap, shaves with a patent razor and cures his cut chin with Hazeline. Then he takes his morning tonic and proceeds to breakfast off Quaker Oats and Sanatogen. He uses saccharine in his coffee, and lactic acid bacilli tablets in his milk. Thereafter he liberally doses himself with pepsin and pancreatin. One of his chief topics of conversation is health fads and cures. He knows all about every specialist in Harley Street. A few years ago he attributed all his ailments to nasal catarrh. Later he blamed everything to his appendix. Last year he was sure it was gall-stones. Now he knows himself to be a victim to acute pancreatitis. Next year he will be convinced that the source of all his troubles is hypersecretion from the pineal gland, and the year after he will dread being a victim to the status lymphaticus.

I suggest that the Insurance Act will educate the Irish farm labourer and the Scotch crofter, the struggling shopkeeper and the ailing artisan, into adopting the psychological attitude of the rich city man. Of course they have not as much money to spend—but they can do their best.

After all, the whole aim of our profession for centuries has been to get the people to send for the doctor. The Insurance Act enables them to do it free of charge. Once they get into the habit of using one doctor free, they begin to desire something better, and thus think they can get it by bringing in a second doctor, or a specialist, and paying him. All of which makes for the good of the profession.

I am, Sir, yours truly,
J. C. MCWALTER, M.A., M.D., LL.B.

Dublin, June 30, 1912.

DOCTORS AND THE INSURANCE ACT.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—If there be any gratitude amongst doctors—which I question—we should thank Dr. Macphee for his letter in the MEDICAL PRESS AND CIRCULAR of July 10th. He shows plainly that the offer of 4s. per annum by Mr. Lloyd George is only political bluff—a strong desire to deal in the cheapest market—even when human lives and human health are concerned (for if the people were cattle there would be an offer of about 40s. per head per annum); and a misleading of Mr. George by the Welsh Colliery doctors. For instance, in Wales a collier pays about 3d. per week for medical services, while the payment of an extra few farthings per week secures medical treatment for wife and children. The term "club doctor" has now become the subject of public scoff and satire. It has been said that starving doctors have no alternative. But there is an alternative—not to starve.

I would take strong objection to Dr. Macphee's statement regarding the acceptance of 8s. 6d. He neglects to state that this is a minimum only, and that it does not include obstetric and surgical fees, medicines, Sunday and night visits, etc. I feel certain that if a capitation grant be adopted, the fee p.c. should be 15s. The German doctors, after many years' fighting, have been granted the 15s. fee. Why not ourselves? There is any amount of money to pay us. For instance, I have calculated that in the United Kingdom men spend about £175,000,000 yearly on prostitution, £137,000,000 on alcohol, £23,000,000 on tobacco, and £44,000,000 on sports. Surely the public can pay their doctors at a higher rate than they do their prostitutes. Even the Christian Church would cry out "For shame!" to any body of men—M.P.'s or others—who offered a poor Mary Magdalen 4s. a year for sexual services, no matter if she were guaranteed 100 "insured persons." Need one do more than refer to the millions sterling used up yearly in foreign missions for the conversion of Jews, Mohammedans, and the other 800 sectarian bodies. Do let us have a little honesty among ourselves, a little less lying about "the Christlike profession," about how each of us make some thousands yearly. We have been "feeding up" the public with the most romantic untruths about our incomes. "Just run off my feet," says liar No. 1. "Just been out at fifteen confinements last week," says liar No. 2. "Think of retiring next year," says liar No. 3, and so on, until one wishes that Ananias and Sapphira had been sterilised, so that the race of medical and other liars had died out.

If the average medical practitioner will refuse to recognise that everything is now against him, he will soon be wiped out. He is on the down grade, and will soon reach the bottom if he does not leave off his slinking tactics. Year by year, more and more well-to-do persons go to the (1) Poor-law hospitals, (2) municipal free hospitals, (3) voluntary hospitals, (4) free vaccinations, (5) midwives, (6) prescribing chemists, (7) St. John Ambulance practitioners, (8) medical inspection of school children, and now (9) medical treatment of these and (10) sanatoria. I have nothing but contempt for the doctor whose sole response to a demand for work and unity is, "Oh, damn it! it will last my time all right." This type of doctor must be termed a medical blighter, for he will neither work himself nor give any financial assistance to any medical organisation. In the meantime, let each doctor warn every parent not to put his son into medicine. At present the number entering are falling off, but this must be acutely accentuated.

I am, Sir, yours truly,
Robert R. Rentoul.

Liverpool.
July 12th, 1912.

"UNDER WHICH KING, BEZONIAN? SPEAK OR DIE!"

To the Editor of The Medical Press and Circular.

Sir,—On p. 3 of the *Daily Graphic* of Monday in last week appears an article by Mr. Sandow on "The Wonderful Mechanics of Digestion: A Remarkable Contribution to the Literature of Health by the Great Physical Culturist." A most lucid explanation is given of the facts that "all human power comes from muscle"; that "muscle development is power development"; and that "therefore the first step in the treatment of indigestion is the scientific development of the muscular power of all the associated organs." Nothing could be more clear or convincing; but for the benefit of those interested in the further development of this subject Mr. Sandow generously offers a gratis copy of his book, entitled "'Indigestion and Dyspepsia,' which it will well repay every dyspeptic to peruse carefully from beginning to end. Instead of floundering in a morass of pseudo-scientific matter, the reader is placed in possession of plain facts in plain language, and fully explanatory of the various physiological processes of digestion. The book also describes the natural method of cure by the Sandow system."

It seems a great pity that before laboriously compiling his lectures on "The Treatment of Dyspepsia," the first of which appears in your issue of July 10th, Dr. Willcox, of St. Mary's Hospital, did not consult the great physical culturist, and learn from him the real fundamental scientific facts of the question. Dr. Willcox is merely an M.D., F.R.C.P.Lond., and has doubtless gone through nothing more than the conventional education and experience that lead to a place of distinction on the staff of a great London Hospital. What is his knowledge compared to that of the Great Physical Culturist? Dr. Willcox's writings suggest that digestion is an extremely complex chemico-physiological process. It may be, he teaches, that owing to simple functional disturbance, or to organic diseases and some failure in the secretions that act upon the food—saliva, gastric juice, bile, or pancreatic fluid. Or again, as Dr. Willcox explains, the subjective symptoms which patients call "indigestion" may be associated with phthisis, with ulcer of the stomach or small intestine, with chronic appendicitis, with hernia, with parasites like tape worm, or with innocent or malignant abdominal growths, and with a score of other diseases of totally different origins. In the light of the teaching of the Great Physical Culturist all this sounds grossly absurd and old-fashioned, and the question arises, would Dr. Willcox be liable to a charge of manslaughter if, through neglect to avail himself of the teaching thus gratuitously offered, he allowed a patient to perish for lack of the "Sandow Treatment." By this treatment we are assured that "the whole health of a patient is steadily built up step by step in a sequence of purely natural changes that involve a whole process of bodily reconstruction. There is no mere attempt to allay what are but the symptoms of disease, but a radical elimination of the causes."

I am, Sir, yours truly,
A Very Simple Practitioner.

July 11th, 1912.

RESEARCH DEFENCE SOCIETY—APPEAL FOR FUNDS.

To the Editor of The Medical Press and Circular.

Sir,—We are of opinion that experiments on animals in this country should be restricted by law, that the present Act should be efficiently administered, and that the utmost care should be taken to ensure the minimum of pain in these experiments.

Some of the anti-vivisection societies have lately adopted methods which are grossly offensive to the public interest. They have opened no less than sixty shops in London and elsewhere. Most of these shops have lasted only a few weeks; but they have had time to spread falsehood, prejudice, hatred and suspicion against scientific research. They have also done harm to small children. It is no light offence to exhibit in public not only brutal cartoons and caricatures, but stuffed animals tied down for operation, while the truth is carefully concealed that no operation is allowed on any animal in this country except under an anæsthetic.

In this connection we would remind the public of the unanimous statement of the Royal Commission:—"To represent that animals in this country are wantonly tortured would in our opinion be absolutely false."

The excuse is offered for these shops that the appliances displayed in the window are actually supplied by the makers. But if the appliances used in our hospitals were displayed in a shop-window with models of human beings tied down for operation it would be no excuse for such a travesty to say that the appliances had actually been supplied by the makers.

Some of these societies, having wealth at their disposal, are able to rent shops in the most crowded thoroughfares or to attract by the very lavish and rather unscrupulous use of money a large audience.

It seems that an effort is being made to work on the mere liking for horrors, real or sham: that no exhibit is too sensational if it can serve to draw attention and to excite passion.

When we think of the vast multitudes of lives, human and animal, saved from pain, disease and death by discoveries made through experiments on animals, we cannot believe that the present methods of anti-vivisection societies are acceptable to sensible and honest people.

The only way to fight these methods is to be constantly publishing the facts of the case put before the Royal Commission and embodied in its final report. The Research Defence Society, in the past twelve months, has given more than a hundred addresses and lantern lectures in all parts of the kingdom, and has distributed more than half-a-million pamphlets and leaflets. But there is much more work waiting to be done, if we had the money for it. We therefore appeal for special donations, to be controlled by the Committee of the Society, and to be used solely for such purposes of education as public lectures and distribution of literature. All cheques should be crossed Messrs. Coutts and Co., and made payable to the Hon. Treasurer, Research Defence Society, 21 Ladbroke Square, London, W. We hope and believe that this appeal, in the interest of the public, will be very generously answered.

On behalf of the Society,
We remain, Sir, yours truly,
David Gill,
President.
Sydney Holland,
Chairman of Committee.
Robert Cecil.
Luke Fildes.
William Ramsay.
Mary Scharlieb.
F. M. Sandwith,
Hon. Treasurer.

21 Ladbroke Square, London, W.

OBITUARY.

DR. W. T. SHEPPARD, OF LIVERPOOL.

We regret to record the death of Dr. William Thomas Sheppard, of 64, Durning Road, Liverpool, which took place on the 9th inst. from heart failure, at the age of 64. He was visiting a patient at whose bedside he suddenly collapsed and expired. About six years ago Dr. Sheppard had a serious illness, which had affected his health ever since.

The deceased was born at Keynsham, Somerset, on May 31st, 1848. He graduated M.B., C.M., with honours at Aberdeen University in 1874, becoming M.D. four years later, and he commenced practice in the same year at Durning Road, Liverpool, carrying it on successfully until his death. An active member of the Catholic Blind Asylum Committee, Dr. Sheppard was also one of the founders of Father Berry's Homes, Shaw Street. He was at one time on the committee of the Catholic Truth Society, and was a past-president of the Somerset Society. He took an active interest in free meals for the poor children of St. Anne's Church, Overbury Street, and he was formerly president of the St. Vincent de Paul Society connected with that parish. Much sympathy is felt with his widow and son, who is a member of the medical profession.

MEDICAL NEWS IN BRIEF.

The Welsh Memorial to King Edward.

The Executive Committee of the King Edward VII. Welsh National Memorial for the Prevention and Abolition of Tuberculosis met at Shrewsbury last week to appoint physicians. Mr. David Davies, M.P., presided. Fifty-six applications were received, and the following eleven appointments were made:—

Dr. James P. Cullen (Sheffield), Dr. H. Hyslop Thomson (Liverpool), Dr. Gerald Hamilton-Wallace (Westmorland), Dr. E. Fairfield Thomas (Cardiff), Dr. Norman Tattersall (Streatham), Dr. M. J. Johnston (Queen Mary Hospital, Carshalton), Dr. James C. Gilchrist (Ventnor), Dr. Cuthbert G. Welch (Northampton), Dr. N. K. Jordan (Manchester), Dr. D. A. Powell (London), and Dr. Thomas Llewellyn Evans (Midhurst).

It is understood that two of these, Drs. Powell and Welch, have since intimated their intention of resigning the appointments.

Annual Meeting of the Medico-Psychological Association.

The 71st annual meeting of the Medico-Psychological Association of Great Britain and Ireland was held at the Guildhall, Gloucester, on Thursday last, the retiring President, Dr. William R. Dawson, in the chair. Prior to the meeting, committee meetings were held, and visits were paid to the Gloucester County Asylums at Wootton and Barnwood.

At the annual meeting the officers, Council and Standing Committees were elected. Dr. James Greig Soutar, of Gloucester, was elected President for the ensuing year, and Dr. James Chambers President-elect. Reports from the Council and Standing Committees were received, and a number of honorary members were elected. The retiring President, on behalf of the Association, presented to Dr. Charles Hubert Bond, Hon. General Secretary of the Association, 1906-12, an illuminated certificate expressing appreciation of the energetic manner in which he had carried out the onerous duties of hon. general secretary for the past six years, during which time, owing to the rapid increase in membership, and scope of the association's activities, the work had greatly increased. In making the presentation, Dr. Dawson referred to the great value of Dr. Bond's work on behalf of the Association, and expressed their best wishes for him in his new sphere of work as a Commissioner in Lunacy.

Papers were read by Mr. J. F. Briscoe on "Appendicitis in Asylums"; Dr. McKinley Reid on "Bacteriology of Forty Cases of Diarrhœa, with Special Reference to Asylum Dysentery"; and an adjourned discussion on Dr. Bernard Hart's paper on "A Case of Double Personality" took place.

In the evening the annual dinner of the Association was held at the Guildhall.

Medical Incomes.

The report of Sir William Plender's inquiry into the income of doctors was issued on the 11th inst. He examined the books for the two years ended December 31st, 1910, and December 31st, 1911, of medical practitioners in Cardiff, Darlington, Darwen, Dundee, Norwich and St. Albans, and obtained information from the superintendents in charge of hospitals, infirmaries and dispensaries serving those towns.

The number of medical practitioners in the six selected areas is 265, and of this number 51 refused access to their records.

The annual gross income derived from visits at patients' houses and attendances at surgeries, less a proportionate deduction for bad debts, is 4s. 2d. per head of the population after deducting therefrom the number of persons attended under contract.

Adding to such income the income derived from patients attended under contract, the average is 4s. 1¾d. per head of the total population.

The fact that the practitioner's income in Dundee does not include medicines should not be neglected in considering these averages.

The New London Dermatological Society.

The annual dinner of the New London Dermatological Society was held on July 11th at Pagani's Restaurant. Dr. P. S. Abraham, the President, was in the chair, and there was a good attendance of members and guests, including ladies. After the loyal toasts had been honoured, that of "The Society" was given by Dr. W. J. Midelton, of Bournemouth, which was responded to by the President, who said that up to the present the Society had fully justified its existence. The health of the guests was proposed by Dr. David Walsh, to which replies were made by Major C. A. Thimm, Dr. Clarence Martin, Editor of the *American Journal of Dermatology,* and Mr. S. G. Kirkby-Gomes. A capital musical programme was provided, the selections contributed by Mr. Sterndale Bennett being especially appreciated.

Royal College of Surgeons of England.

At a meeting of the Council of the College held on Thursday last, the congratulations of the Council were given to the President, Sir Rickman J. Godlee, on his having received a baronetcy, and to Sir John Bland-Sutton and Sir Berkeley Moynihan on being knighted on the occasion of His Majesty's birthday. Sir Frederic Eve, Sir Anthony Bowlby, and Sir Berkeley Moynihan were admitted and took their seats on the Council. Mr. D'Arcy Power, the other newly-elected Fellow, was unable to attend.

Sir Rickman Godlee was re-elected President, and Mr. Clinton T. Dent and Mr. G. H. Makins, C.B., were elected Vice-Presidents for the ensuing year.

The following Professors and Lecturers were elected for the ensuing year at the same meeting :—

Hunterian Professors.—Joseph E. Adams, F.R.C.S., Arthur Keith, M.D., F.R.C.S., Wilfred B. L. Trotter, M.D., F.R.C.S., Kenneth M. Walker, F.R.C.S., and William Wright, F.R.C.S.

Arris and Gale Lecturers.—W. Blair Bell, M.D., M.R.C.S.Liverpool, and C. G. Seligmann, M.D., F.R.C.P.

Erasmus Wilson Lecturer.—S. G. Shattock, F.R.C.S.

Arnott Demonstrator.—Arthur Keith, M.D., F.R.C.S.

University of Aberdeen.

At the graduation ceremony held on July 9th, the following degrees were conferred :—

Degree of Doctor of Medicine (M.D.).—George S. Melvin, M.B., Ch.B., Dilkusha, Montrose; John A. Beattie, M.B., Ch.B., St. Pancras South Infirmary, London; Robert M. Chance, M.B., Ch.B., The Infirmary, Peterborough; Andrew J. Shinnie, M.B., Ch.B., Clapham Park, London; David J. S. Stephen, M.B., Ch.B., The Lawn, Lincoln; David M. Baillie, M.B., Ch.B., Chelsea Infirmary, London; Andrew L. E. F. Coleman, M.B., Ch.B., General Infirmary, Stafford; Henry G. Deans, M.A., M.B., C.M.; Adam Gray, M.B., Ch.B., New Southgate, London; George Michie, M.A., M.B., C.M., Johannesburg; William R. C. Middleton, M.A., M.B., C.M., Singapore; James Mitchell, M.B., Ch.B., B.Sc., Brigg, Lincolnshire; Henry W. Smith, M.B., Ch.B., Lebanon Hospital, Asfureyeh, Beyrout, Syria; George I. T. Stewart, M.A., M.B., C.M., F.R.C.S., Ipswich.

Degrees of Bachelor of Medicine (M.B.) and Bachelor of Surgery (Ch.B.).—David S. Badenoch, William F. Beattie, Martin M. Cruickshank, Ratan E. Dastur, Elizabeth M. Edwards, Alexander F. Fraser, M.A., William J. S. Ingram, Sydney W. Lund, Edgar A. Pearson, Arthur C. M. Savege, John Shaw, Charles W. Weir, and John Wood.

Diploma in Public Health.—John Brown, M.B. Aberd.; Edward Wood Wood-Mason, M.B.Aberd; Herbert Stewart Milne, M.B.Aberd.; James George Muterer, M.B.Aberd.

The John Murray Medal and Scholarship (awarded to the most Distinguished Graduate (M.B.) of 1912) was gained by Richard R. M. Porter, M.A., M.B., Ch.B., Aberdeen.

Trinity College, Dublin.

The following candidates have passed the Preliminary Scientific Examination, Trinity Term, 1912 :—

Physics and Chemistry.—Alfred L. Wilson, Eugene J. McSwiney, Patrick Rocks, William E. B. Collins, William J. Dowling, Eric E. Beatty, Charles O. J. Young, Frederick J. Murphy, Thomas W. Sweetnam, Eileen Glenn, Robert A. C. Barrett, Thomas S. C. Black, Sydney V. Furlong, Roland H. Graham, Thos. Stanton, Carl O'Connor, John A. C. Kidd, and Francois A. Joubert.

Botany and Zoology.—Norman L. Bor, Thomas P. Chapman, Charles H. Comerford and Patrick Rocks (passed on high marks), Patrick B. Moloney, Robert C. B. Ramsay, Alan F. Grimbly, Eugene J. McSwiney, Harold MacNeile Dixon, William R. Fearon, Andries A. W. Albertyn, Mortimer McGee Russell, Francois A. Joubert, Frederick J. Murphy, Paul H. S. Smith, Robert T. Stoney, William R. Burns, Thomas J. Lane, James Leahy, David S. Prentice, Benjamin D. Merrin, Charles O. J. Young, Millicent Hamilton Johnston, William J. Hamilton, Francis G. S. Battersby, Joseph G. Bird, Edward Lipman, Cyril R. Littledale, Eileen N. Smith, Walter A. Bullen, and Alan G. Wright.

Intermediate Medical Examination—Part I.—Herbert McW. Daniel, Richard W. Shegog, and Isaac W. Corkey (passed on high marks), Charles D. Pile, John Speares, Eric W. Craig, Edmund D. T. Hayes, Evelyn Ross, Violet M. Deale, Esther V. Adderley, James S. Robinson, George Joughin, Christopher C. Albertyn, Geraldine Murphy, Arthur C. Bateman, Robert L. Vance, George Stanton, William B. Walker, George H. Wood, Clara B. M. Adderley, Eric A. Lumley, Andrew J. Horne, Cecil McL. West, and William B. Cathcart.

Cunningham Medal.—Herbert McW. Daniel.

Purser Medal.—Herbert McW. Daniel.

Final Medical Examination—Part I.—David H. Hadden, Frederick G. Beatty, James H. Fletcher, and Thomas V. Oldham (passed on high marks), Frederick G. Flood, Mabel A. Dobbin, Geoffrey M. Fleming, Charles O'Reilly, Francis A. Roddy, William F. Evans, Charles P. Kelly, William H. R. M'Carter, Theodore W. Allen, Rupert C. Lowe, Amy F. Nash, Henry I. G. Rutherford, William S. Boyd, Frank S. Gillespie, Eleanor Taylor, Joseph S. English, George A. Bridge, Reginald H. Jones, John A. MacMahon, Etienne J. Malherbe, Geoffrey A. Hoffman, and Michael J. Ryan.

Final Medical Examination, Part II.—Midwifery.—Georgina Revington, Kenneth K. Drury, Eileen M. Hewitt, and Charles D. Goodenough (passed on high marks), Thomas J. Kelly, James A. Small, William E. Fetherstonhaugh, Richard A. Stewart, Robert Hemphill, Frederick B. McCarter, Robert A. G. Elliott, Joseph A. Maxwell, Edwin F. O'Connor, Edward S. Johnson, William Peyton, Richard S. G. Halpin, and Robert H. C. Lyons.

Intermediate Dental Examination.—Louis E. Wigoder and Herbert J. Wright.

Diploma in Public Health.—Part I.—James T. McEntyre. Part II.—Robert W. Murphy, Arthur F. B. Shaw, Henry J. Keane, and James T. McEntyre.

Conjoint Examinations in Ireland.

The following candidates have passed the First Professional Examination of the Royal College of Physicians and the Royal College of Surgeons, June, 1912.—Miss E. Budd, B. Hirson, and Miss M. McMullen (with honours), T. S. Ambrose, H. M. Alexander, H. E. Andrews, D. Boland, M. Bradley, J. F. Coffey, T. Curran, E. C. H. Ewart, D. H. Ferris, J. A. Fretton, F. B. Harrison, H. Levison, E. McCarthy, T. F. Moran, C. Murray, J. P. Pegum, C. W. Robinson, J. P. Sheridan, and G. C. L. Woodroffe.

Preliminary Examination.—F. J. Bowers, T. J. Clune, J. Cusack, J. L. Farnon, J. Geraghty, F. G. Hall, V. Hawkins, P. Hegarty, J. F. Holmes, L. B. Leonard, M. O'Donnell, M. P. O'Meara, W. Robinson, A. Y. Sloane, R. T. Tate, and H. C. Williamson.

Third Professional Examination.—R. J. Brooks and J. Lanigan (with honours), R. A. Austin, H. A. S. Deane, G. S. Douglas, F. B. McTavish, J. J. O'Connell, H. O'Donoghue, J. J. Reynolds, M. Shipsey, and F. M. Taylor.

Final Examination.—W. I. Adams, P. J. Burke, U. L. Bourke, H. C. A. T. Cannon, W. H. Condell, M. Garry, J. Good, R. M. Gordon, R. F. Griffith, F. Hannigan, M. J. Hillery, J. M. Horan, W. H. Johnston, T. Kennedy, M. Meehan, F. P. McDermott, C. Molan, H. E. O'Brien, A. A. O'Connor, J. C. O'Farrell, A. J. Patterson, D. P. H. Pearson, J. B. Power, S. Punch, M. Quinlan, Miss B. Sieff, V. J. White, and G. Young.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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Mr. J. M. Maule (Peckham).—Your communication is interesting, but it is hardly one we could place before our readers, having no special medical connection.

HORSES AND THE HEAT.

To the Editor of The Medical Press and Circular.

Sir,—With the approach of the hottest months of the year, will you allow me to make a practical suggestion with regard to "summering" horses? There seems to be an established idea that horses can be turned out for the summer, and that providing they have sufficient grass and water, they require nothing else. My belief is different, and my practice is this: During the heat of the day, and so long as the flies are troublesome, I bring my horses in at 9 a.m. and keep them stabled till 6 p.m., turning them out again for the night. They have only one small feed at mid-day, and yet they keep in capital condition and are ready for work when required.

W. J. C. Norris.

Thakeham, Pulborough, Sussex,
July, 1912.

Mr. B. E. (London, N.).—The induction of sleep by means of the electric current was first attempted by Dr. S. Leduc, of Nantes, in 1907, when he published "Le Sommeil Electrique," describing the method and the apparatus employed. The "Leduc current" is an intermittent one, of low tension, and of constant direction. Experiments are still being pursued in order to ascertain the most innocuous manner of producing sleep by this means.

M.B. (Edin.) (Hants).—Artificial musk is known chemically as trinitrobutylxylol, which is soluble in acetone, benzol or chloroform. We are not aware that it offers any pharmacological advantages over the natural product.

Dr. C. D. C. (New York).—Yes, on June 26th, Montreal and Ottawa.

F. J. M. (Dublin).—Letter has been sent to the address in Paris.

FOOT AND MOUTH DISEASE.

A circular has been issued by the Local Government Board warning Medical Officers of Health, Inspectors of Nuisances, and Assistant Officers under the Food Regulations that, in view of the serious nature of Foot and Mouth Disease, these officials should exercise the greatest care and strictest vigilance in the supervision of abattoirs and slaughter-houses and places where meat is deposited, prepared or exposed for sale. The parts which require specially careful examination are the heads, tongues and feet. Whenever lesions or signs suspicious of the disease are discovered the officers should communicate at once with the Inspector appointed under the Diseases of Animals Acts, and retain for inspection the suspected parts in order that any further action which may be considered necessary to trace the disease to its source may be taken.

Dr. Tracey.—That is one of the disadvantages of cycling one has to reckon with. A friend who uses both pedal and motorcycle, says he has found a recently invented puncture remedy, called the "Cyclonier" of distinct service, as it prevents pneumatic tyres becoming deflated when punctured by small objects, such as thorns, nails or flints.

Meetings of the Societies, Lectures, &c.

Wednesday, July 17th.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H Duncan). 5.30 p.m.: Eye Operations (Mr. Brooks).

Thursday, July 18th.

Royal Society of Medicine (Dermatological Section) (1 Wimpole Street, W.).—5 p.m.: Demonstration of Cases: Dr. G. Pernet: Mycosi Fungoides d'Emblée. Dr. MacLeod: Specimens of Keloids resulting from Piercing the Ear for Earrings. Dr. Sequeira: Hæmorrhagic Lupus Erythematosus, and other Cases.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics:—Medical Out-patient (Dr. A. J. Whiting): Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

Appointments.

Davies-Colley, H., M.C.Cantab., F.R.C.S.Eng., Fifth Assistant Surgeon to Guy's Hospital.

Kingdon, E. O., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Holsworthy District of the county of Devon.

Mathias, C. D., M.B., B.C.Cantab., Certifying Surgeon under the Factory and Workshop Acts for the Tenby District of the county of Pembroke.

Stanley, E. Gerald, M.B., B.S.Lond., F.R.C.S.Eng., Demonstrator of Anatomy at St. Bartholomew's Hospital.

Steward, F. J., M.D.Lond., F.R.C.S.Eng., Senior Assistant Surgeon to Guy's Hospital.

Symonds, C. J., M.D., M.S.Lond., F.R.C.S.Eng., Consulting Surgeon to Guy's Hospital.

Taylor, James George, M.D.Cantab., one of the Medical Referees under the Workmen's Compensation Act, 1906, for County Court Circuit No. 29, to be attached more particularly to Chester, Mold and Flint, and Holywell County Courts.

Vacancies.

Prevention of Consumption Department of the Royal Hospital for Diseases of the Chest, City Road, E.C.—Medical Officer. Salary £250 per annum. Applications to the Secretary.

Westminster General Dispensary.—Resident Medical Officer. Salary £120 per annum, with rooms, gas, coals, and attendance. Applications to the Secretary, 9 Gerrard Street, Soho.

Hampstead General and North-West London Hospital.—Resident Casualty Officer. Salary £140 per annum, with board, residence, and laundry. Applications to A. E. Thomas, Secretary, Haverstock Hill, N.W.

Down County Council.—Medical Superintendent. Salary £500 per annum, with an allowance of £150 per annum, for travelling expenses. Applications to the Secretary, Council Offices, Courthouse, Downpatrick.

Nottingham General Dispensary.—Assistant Resident Surgeon. Salary £160 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

County and City Asylum, Powick, Worcester.—Junior Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, washing and attendance. Applications to Medical Superintendent.

Gravesend Hospital.—House Surgeon. Salary £100 per annum, with board, and residence. Applications to W. Pearson, Secretary.

Ayr District Asylum.—Junior Assistant Physician. Salary £140 per annum, with board, lodging, and laundry. Applications to Dr. McRae, Glengall House, Ayr.

Lincoln Mental Hospital, The Lawn, Lincoln.—Assistant Medical Officer. Salary £150 per annum, with board, etc. Applications to Dr. Russell, Medical Superintendent.

Staffordshire General Infirmary, Stafford.—House Physician. Salary £100 per annum, with board, residence, and laundry. Applications to Richard Battle, Secretary.

Staffordshire General Infirmary, Stafford.—House Surgeon. Salary £120 per annum, with board, residence, and laundry. Applications to the Secretary.

Births.

Bashford.—On July 11th, at 18 Downshire Hill, Hampstead, the wife of H. H. Bashford, M.D., of a daughter.

Gibbes.—On July 11th, at 92 Church Street, Kensington, W., the wife of Lewis N. Gibbs, M.R.C.S., L.R.C.P., of a daughter.

Minett.—On July 5th, at 25 Dorset Square, N.W., the wife of Surgeon Percy F. Minett, Royal Navy, of a son.

Powell-Evans.—On July 11th, at Berth Ddu, Wimbledon, the wife of David Robert Powell-Evans, M.R.C.S., L.R.C.P., L.S.A., of a son.

Prideaux.—On June 25th, at Nadroga, Fiji, the wife of Engledue Prideaux, M.R.C.S., of a daughter. (By cable.)

Sears.—On July 10th, at "Point View," Burnt Ash Hill, Lee, S.E., the wife of C. Newton Sears, M.D., B.S.(Lond.), M.R.C.S., L.R.C.P., of a son.

Watson.—On July 14th, at Wootton Bassett, Wilts., to Dr. and Mrs. Watson—a son.

Marriages.

Mennell—Allen.—On July 11th, at St. James, Norlands, W., James Beaver Mennell, M.D.Cantab., to Elizabeth Walton, younger daughter of Mrs. Allen, of Cazenovia, New York.

Deaths.

Hudson.—On July 12th, near Nelson, N.Z., the result of a motor accident, James Hudson, M.B.Lond., M.R.C.S.Eng., (By cable.)

Shillitoe.—On July 10th, at Bournemouth, Alfred Ashby, M.B., aged 49, son of Buxton Shillitoe, of Birch Mount, Sydenham Hill.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, JULY 24, 1912. No. 4.

NOTES AND COMMENTS.

The B.M.A. Meeting. THE meeting at Liverpool this year is perhaps more vitally important to the interests of the medical profession than any that has taken place before. Our collective policy as to the National Insurance Act has been virtually decided, and our welfare determined for generations to come. There is one point upon which we think the British Medical Association would do well to reconsider its constitution—namely, the holding of an annual general meeting, open to all members. That is the statutory safeguard of the individual member in the case of all limited companies. It is only of late years that the annual general meeting has been abolished, as part of the policy that has resulted in placing the control of the Association in the hands of a central executive. How completely that has been effected has been shown by the way in which the Council has retained office, although absolutely discredited by formal resolution of an overwhelming majority of members of the Association. The policy of the executive could be publicly discussed without any intervening machinery of delegation at an annual general meeting, and it is to be hoped that the expediency of a reform in that direction will be, at any rate, adequately discussed.

The Imperial Cancer Fund Administration. THE Imperial Cancer Fund is a nobly conceived attempt to advance our knowledge as regards one of the obscurest of human maladies. The endowment of medical research in the United Kingdom is so scanty in nature and haphazard in distribution that it is a matter of congratulation that ample resources have been placed at the disposal of this particular Fund. It is all the more desirable that the administration of this body be catholic and generous so that all workers who can show a reasonable claim to recognition, may receive from the Imperial Cancer Fund that practical help which is absolutely necessary to the performance of modern scientific research. For a long time past it has been known that only those who work on certain lines and who will consent to sink their individuality in that of the Fund, can hope to share in the advantages of the fine endowment which, after all, has been founded for the benefit of medical research generally, and not to support the views of any particular school of study. Recent events have emphasised the need of a reform in the methods of the Fund. Cancer is still a mysterious problem and the Fund has no more infallibility in method than scores of outside workers, who are hampered by the lack of a well-equipped laboratory and by the prohibitive cost of experimental research. To be narrow and self-sufficient in science is to court anything but success, and the tendency of the man in the street, whose judgment is not to be altogether despised, is to ask what the Fund has so far accomplished in the discovery of the cause or the cure of cancer. The Radium Institute might, perhaps, find room for some of the earnest workers in cancer, who are unable to find encouragement elsewhere. The field of research in radium is necessarily somewhat restricted, and it should not be difficult to arrange for concurrent work in cancer, the disease which of all others it is hoped radium will control. Meanwhile there seems to be a distinct want for a bibliography of cancer. We doubt if the Imperial Cancer Fund, in spite of its amplitude of resources, has yet grappled with that want. It is hardly necessary to add that we have the warmest admiration for the Imperial Cancer Fund and for the magnificent scientific work that it is accomplishing with a fine spirit of devotion to the highest of human ideals.

Small-pox—Still a Danger. THE report that small-pox has broken out at Nottingham serves as a reminder that a particularly relentless scourge still lurks within our gates. Three cases were notified at the end of last week, and it will be of interest to watch the progress of events within the next few weeks or months. Nottingham is a densely crowded centre of population, containing many persons unprotected by vaccination and among these the malady may spread like wildfire. Unhappily, since the advent of the "conscientious objector"—introduced by Mr. Balfour's Government—the risk of serious small-pox epidemics has been greatly multiplied. In London there is an army of unvaccinated persons simply inviting attack by one of the most subtle and deadly of all the zymotic infections that prey upon mankind. Certain parts of the Metropolis, such as Whitechapel, would probably be decimated by an outbreak of small-pox. Leicester, again, a city progressive in other directions, has unfortunately for many years been dominated by the anti-vaccinationist craze. One day, in spite of her first-rate sanitary administration, the city may have to recognise the folly of flying in the face of modern medical science—as happened in the small-pox epidemic at Gloucester a few years ago.

The Board of Trade and the Colour Vision Test. THE sight-testing of sailors, to which Dr. Lynch recently called attention in the House of Commons, is one of national importance. It may be well to add to our note of last week that the Admiralty has for some time abandoned the fallacious Holmgren wool test and adopted Dr. Edridge Green's lantern. It is the

Board of Trade which clings to the exploded method which passes sailors as normal in colour vision when they may be shown to be colour-blind by the lantern test. Surely a Board of that standing should be strong enough to shake off the domination of a small scientific clique which clings to the beliefs and methods of a prior generation. The constitution of the Committee of Investigation into the subject was, to say the least of it, somewhat unfortunate, for it was simply packed with men who were responsible for the adoption of the Holmgren test, and although they have advocated a lantern test, they have made a new one to suit their own requirements. The general view of authorities on the subject is that this lantern is useless for its purpose and unnecessary in view of the existence of a perfect instrument of the kind.

LEADING ARTICLES.

THE PROGRESS OF CANCER RESEARCH.

The subject of cancer and cancer cures has lately been brought to public notice in a manner that was hardly likely to promote the dignity of scientific research into the subject. Like all work in the experimental or unfinished stage, unprofessional onlookers can never possibly judge the merits or drawbacks of the methods of investigation into such an intricate subject as the ætiology and pathology of malignant disease in all its aspects. In spite of all criticism, however, the work of the Imperial Cancer Research Fund has steadily continued, and, according to the report of the Executive Committee laid before the eleventh annual meeting of the Fund last week, there has been no lack of activity in the technical research carried out under its auspices. One thing stands out clearly in the report, namely, that in order to secure and retain the services of highly trained investigators, it has been found necessary that they should be remunerated at such a rate as to free them from any desire to seek other appointments, and at the same time to enable the Fund to attract workers of originality and skilled training. For this purpose a revised scale of salaries has been recommended and adopted. It is satisfactory to note that the new laboratories provided by the Royal Colleges of Physicians and of Surgeons at their new examination hall in Queen Square have been now completed and occupied, that the general superintendent and his staff are entirely satisfied with them, and that they are a great improvement on those hitherto used. The principal scientific investigations of the year have their basis in the fact that inoculated cancer is found, in a certain proportion of instances, to perish after having attained a certain activity of growth, and have been mainly directed to ascertain the conditions which enable animals to resist the inoculation of cancer, either entirely, so that the graft perishes and the inoculation fails, or by the death of the tumour when it has already taken root and begun to grow. The study of healing in spontaneous and in transplanted tumours shows that the cure for cancer must be sought by obtaining a fuller knowledge of those properties of the malignant cell which render it susceptible to inimical influences, and not merely by striving to induce these influences in its environment. From small beginnings with tumours easy of attack it is to be hoped that advance will be made, stage by stage, until the cells of the most virulent transplantable tumours and of malignant spontaneous growths may be rendered susceptible to changes in their environment, and liable to extinction through the agency of these changes. even though they cannot be made to succumb to direct attack. The subject of cancer of the tongue in human beings has been selected for special study during the year, and no less than fifty-six specimens have been examined microscopically in consecutive series of sections from one end of the diseased area to the other, with the result that cancer was recognised in chronically irritated areas on the surface of the tongue in earlier stages than had previously been possible. What had formerly been regarded as pre-cancerous conditions were shown to be actually cancer, and were in fact miniature pictures of the more fully-developed disease. The surgical bearings of this investigation have been described by the late Sir Henry Butlin (through whose instrumentality many of the specimens were obtained), and their importance, not only for the treatment of cancer of the tongue, but for all cancerous conditions, need not be emphasised. Further problems for immediate investigation are stated to be the question of the influence of hereditary predisposition to the disease, and also whether immunity or resistance to growth of cancer may be produced by inoculation with tumour or normal tissue from the same animal or from that of another species. The annual subscriptions to the Fund, it it stated, only amount to some two hundred guineas —the price of a small motor-car—which seems utterly ridiculous when the importance of maintaining the high scientific standard of work in this direction is considered. Some of the millions reserved for the treatment of tuberculosis under the National Insurance Act might well have been devoted towards the work of investigation into the causation and treatment of a malady quite as terrible as consumption.

THE NEWSPAPERS AND THE SELECT COMMITTEE ON PATENT MEDICINES.

The Select Committee of the House of Commons has patiently pursued its labours to the limit of the session, and will doubtless resume after the autumn holiday. Representatives of the British Medical Association have been heard at length, and we understand there is still important medical evidence forthcoming. So far as the evidence goes it furnishes plenty of material for serious consideration on the part of the Committee. Our present purpose, however, is not to attempt any analysis of the position, but to draw attention to the significant action of the lay newspapers with regard to reporting the proceedings of the Committee. The reports so far have been extremely full and fair in *The Times* and the *Daily Telegraph*, but in other papers, notably the *Daily News*, they have been short and meagre and latterly have been conspicuous by their absence. Hitherto, little or nothing has been said about the share of the newspapers in the patent medicine trade, but last week Mr. Henry Sewill stated the case against them fairly and temperately. His evidence was dismissed by *The Times* in four lines, and by a bare notice in one or two other leading newspapers. It is perhaps expecting too much of human nature to ask them to publish what amounts to a charge of sharing in the profits of a questionable trade. After all the newspapers are within their rights in accepting the advertisement of proprietary drugs just as do the medical journals. The difference between the two is that the medical journals carefully discriminate between what may be called the legitimate and useful, and the unjustifiable and obviously false remedies. Can the lay newspaper editor be blamed if he is not able readily to make a similar distinction? It is to be hoped that the report of the Select Committee will give him guidance upon the point, and will at the same time supply the public with some sort of similar signpost. We have too much confidence in the fine traditions of British journalism to think that once the gross evils of the patent medicine traffic are fully exposed the advertisements will any longer find any wide range of publicity, at any rate, in the better class of journals.

CURRENT TOPICS.

Buxton.

Of the classic spas of the United Kingdom, Buxton is not the least famous. So far as natural beauty of surroundings, not to speak of the medicinal virtues of its springs, is concerned, Buxton compares favourably with the Continental spas of a kindred nature to which our countrymen are wont to flock in large numbers. Now that radio-activity has been demonstrated in the waters of Buxton, the seal of science has been formally impressed upon her charter. The town authorities have recently availed themselves of a new spring having strongly radio-active waters of a temperature of 88° F. A new and handsome Pump Room has been built at the famous St. Ann's Well, the waters of which have been enshrined in successive sheltering halls for many centuries past. A few days since St. Ann's Well was reopened in its twentieth-century dress by the Duke of Devonshire in the presence of a number of townsfolk and distinguished guests. Buxton has always enjoyed a high repute amongst the medical profession for the healing virtues of its waters, and it is certain to take a front rank in the tide of prosperity that may be confidently anticipated for our beautiful inland watering-places. It is worthy of note that King George and Queen Mary have taken a keen interest in the revival of popularity of the British spas, which has been manifested ever since the identification of the modern marvels of radio-activity in their thermal waters.

The Sanatorium Benefit and Private Practitioners.

The Sanatorium Benefit under the Insurance Act is intended to furnish a weapon for tackling the entire tuberculosis problem. Speaking roughly, it may be taken that the treatment given under the benefit will fall into one of two classes—institutional and domiciliary. The dispensary will probably form the centre about which home treatment will focus. It is an important public question how far the private practitioner is to take part in this part of the campaign. It may be assumed that in the great majority of cases it will be he who will make the diagnosis of tuberculosis. That he should also have a prominent part in the treatment of the case is, we believe, essential. This has been freely recognised in the report of the Departmental Committee on tuberculosis (pp. 17, 18):—"The Committee are of opinion that it is of primary importance to the lasting success of any scheme for dealing with tuberculosis that it should enlist the hearty co-operation and stimulate the interest of the general medical practitioners of the country. Their intimate personal relations with patients and their influence in the homes of the people are forces which should be actively enlisted in the campaign against the disease as aids to securing its early recognition and methodical treatment, as well as in promoting the effective after-care of cases of tuberculosis . . ." Again—"In the case, at all events, of insured persons, patients living at home who are treated at or under the supervision of the dispensary, should generally be placed, where they are willing, under the care of some general practitioner, who will carry out the necessary home treatment in consultation with the chief tuberculosis officer of the dispensary, and who will, where the patients are insured persons, be paid out of the funds available for sanatorium benefit." The Committee insists, again and again, that the function of the dispensary as regards treatment should be merely consultative. We find it necessary to emphasise this aspect of the sanatorium benefit, since it is one which is likely to be overlooked by insurance committees unless the point is continually pressed on them.

The Wasted M.D. Thesis.

The question has often been asked as to what becomes of the thesis required by some of the older universities of their bachelors of medicine before proceeding to the higher degree of doctor. Many of these papers are the outcome of much research and they frequently embody a good deal of original work and observation. A more valuable series of medical monographs can hardly be imagined than the collected M.D. theses of a given university. A few of these, but only a small minority, see the light of the medical press where they are occasionally reprinted *in toto* or in abstract for the benefit of the profession in general or, sometimes, for the legitimate advertisement of the author in particular. The greater number, however, of these interesting documents are doomed to the obscurity of a shelf in a college library where they remain, for all intents and purposes, as completely buried as if they were in the catacombs. In this sense, therefore, they are wasted because they are inaccessible to the general medical reader. Not so the Paris theses, all of which can be readily seen in London. It is discouraging to the author of a work of this kind to know that his thesis will never, perhaps, be referred to simply because it cannot be got at by those who have been pursuing a similar line of investigation and who wish to know what has been done by other workers in the same field. What is urgently needed is that a copy of every accepted M.D. thesis should be placed in a separate section of one of the great medical libraries, say, that of the Royal Society of Medicine, for easy reference by all. Only in this way can the reproach of allowing so much good work to be buried alive be removed once and for all.

The Old Age Bacillus.

That distinguished scientist, M. Metchnikoff, has advanced another method for evading the drawbacks of old age. Everyone knows the buttermilk theory which a few years since kept the dairies busy in all parts of the civilised world, old and new, but of which little is now heard save as a survival in the practice of medical men of conservative tendencies. In spite of the rise and fal' of the lacto-bacillus theory its illustrious inventor now comes forward with another and even more ingenious talisman. Old age, it seems, is a sort of chronic poisoning attributable to the absorption of such intestinal products as phenol, indol and skatol. Metchnikoff observed that in white rats the production of these substances is lessened by feeding with beetroot and other sweet foods. He further found that in the dog a special micro-organism, the glycobacter bacillus, turns starch into sugar, which fermenting in turn forms acids that destroy phenol, indol and skatol. The inference is, accordingly, that the glycobacter should be introduced into the human intestine, and we presume that this organism will shortly be placed upon the drug market by the Parisian pharmacists, if, indeed, that has not been already accomplished. Critics on this side of the Channel will probably want to know why dogs, who may be assumed to enjoy a sort of monopoly in the glycobacter bacillus, do not themselves attain old age. On the face of it, M. Metchnikoff's original idea of investigating the life conditions of the long-lived Balkan populations is sound, and the whole matter is well worth a collective scientific investigation from *a posteriori* rather than from *a priori* grounds. Here is a good opportunity for some British or American millionaire anxious to confer a lasting benefit upon the world. Why not found a scientific commission to investigate the causes and conditions of long life in the Balkan principalities?

Quackery in Berlin.

Berlin is the centre of an empire in which police methods rule supreme, and where laws are multiple, manifold, and minute to the last degree. In spite of this collective State machinery quackery flourishes in that great centre of modern civilisation with a rankness unrivalled even in the United Kingdom, which permits American and other foreign quacks to exploit its subjects in addition to a vast home industry of a like undesirable kind. According to a recently published official report by Mr. Abraham Flexner, there are in Berlin 3,584 physicians and 1,349 registered "quacks." It says a good deal for the philosophic complexity of the Teutonic mind that it is capable of devising on the one hand a vast network of statute and administrative law against unqualified medical practice and the sale of nostrums, while, on the other, it sets up a register for those whom it is attempting thus rigorously to restrain. Mr. Flexner observes that quackery in Germany has reached unparalleled dimensions. It has become a serious factor in reducing the possible income of the legitimate physician and surgeon. It cloaks immorality and vice. Both the medical profession and the public have suffered grievously from this great social evil. To this it may be added that in the long run the economic loss will fall upon the shoulders of the community. The experience of Germany proves that it is not by laws and by police regulations alone that the pest of quackery will be exterminated. The necessary further condition will probably be found mainly in the education of the people in the laws of wholesome living, and the proper place of medical art in the maintenance of the national and the individual health.

Consumption Sanatoria and Infection.

We have often commented on the great obstruction which an increasing dread of infection puts in the way of the proper treatment of tuberculosis. The public is unable to distinguish any differences of meaning in the comprehensive word "infectious." A few months ago we had to chronicle how an ignorant agitation, backed, we were sorry to notice, by the carelessly given opinions of medical men who ought to have known better, succeeded in stopping the proposed enlargement of the Royal Hospital for Incurables in Dublin. Doubtless encouraged by this success, the neighbours of Peamount in County Dublin, where Lady Aberdeen proposes to establish a sanatorium, are raising a hubbub. It is, in truth, becoming increasingly difficult to obtain a site for a sanatorium anywhere on account of the mistaken fears of those who live in the vicinity. The only way to overcome this timidity is, we believe, to be strictly accurate in all statements made by experts as regards the danger of infection. To deny all possibility of danger is as foolish as to regard the tuberculous as a danger to all who come near them. The truth is that under proper precautions the danger may be reduced to a minimum. The present position with regard to Peamount is not without its amusing side, in that some of those who are now minimising the danger of infection were loud enough a few months ago in denunciation of the Donnybrook scheme. We hope, however, that, despite the opposition of the ill-informed and the indiscretion of some of her friends, Lady Aberdeen will not be intimidated from carrying out her project of a sanatorium at Peamount.

The Tuberculin Dispensary League.

One of the most striking features of the modern campaign against consumption is the growth of the dispensary movement. The tuberculosis dispensary should not be confused with the tuberculin institution, for the former does not necessarily carry out the whole programme of the latter, whereas the tuberculin dispensary claims to treat the poor consumptive by injections of tuberculin as a direct and specific measure. At the second annual meeting of the Tuberculin Dispensary League held last week, under the presidency of Lady Mayo, Dr. Camac Wilkinson, the pioneer of the movement, stated that it had been proved that £350 had enabled more cases to be treated at a dispensary than one of the great consumption hospitals could do in the same time at a cost of many thousands. The primary object of the League is to bring within the reach of the tuberculous poor some simple and effective method of treatment. The chief dispensary at 263 Kennington Road, had become so crowded that it had been found necessary to open it on one or two extra days in the week. Lectures have been periodically given thereat to medical practitioners with the result that tuberculin dispensaries had invariably been started elsewhere upon the lines advocated by Dr. Wilkinson, and it may be noted that seventy per cent. of those under treatment were attending their ordinary work. Such a report is most encouraging, and it is significant that the principal hospitals for consumption have recognised that the system inaugurated by the League cannot be ignored.

Contamination of Bread.

The attention of the public has been focussed for so long on the dangers arising from unclean milk that there is some chance of everyone getting uncontaminated milk in the near future. But the public is not consistent, nor can it retain more than one idea at a time. Whilst agitation was going on everywhere for the general use of pasteurised milk, the bread of the multitude was handled with unclean hands. It was, and still is, carried through the streets on the tops of bread-vans exposed to all the dust that blows. It is therefore not surprising that many cases of disease can be traced to carelessness in regard to bread. Recently, in the Government Hospital for the Insane in Washington, an attendant who had been caring for a typhoid patient at home, was the means of carrying typhoid to several patients, owing to the fact that he handled the bread supply of the institution. In another large American hospital a typhoid carrier, whose duty was to slice all the bread used in the dining room, had been responsible for seven cases of typhoid within a few months. In the *American Journal of Public Health,* a writer points out that many loaves purchased in shops are covered with hundreds of thousands of bacteria. Of course, the number of bacteria was found to depend largely on the cleanliness or uncleanliness of the shop, but more especially on whether the loaf was kept wrapped up or not. In shops of ordinary cleanliness, where the loaves were kept wrapped, the bacterial contamination was not great. *B. coli* and the typhoid bacillus have been found frequently. This subject requires some fresh investigation in this country.

PERSONAL.

Mr. P. P. Cole, F.R.C.S., has been appointed Assistant Surgeon to the "Dreadnought" Hospital.

Mr. W. Girling Ball, F.R.C.S.Eng., has been appointed Surgical Registrar at St. Bartholomew's Hospital.

Mr. T. Stanbury Brook, M.R.C.S., L.R.C.P., has been appointed Medical Officer of Health to the Chingford Urban District Council.

Dr. R. Drummond Maxwell, M.D., M.R.C.P., F.R.C.S., had been appointed Physician to In-patients at the Queen Charlotte's Hospital.

Among the recipients of the honorary degree of LL.D. of the University of St. Andrews last week were Sir Thomas Boor Crosby, M.D., and Sir John Batty Tuke, M.D.

Dr. Herbert Gibbons Ward, M.D., Ch.B., D.P.H.Vict., has been appointed Medical Officer of Health and School Medical Officer for the Borough of Royal Leamington Spa.

Sir Thomas Crosby, M.D., Lord Mayor of London, will attend a meeting of the West London Medico-Chirurgical Society at the West London Hospital tomorrow (Thursday), at 5 p.m., when he will be elected an Honorary Member of the Society.

Dr. F. R. Parakh, M.D., B.S.Vict., L.R.C.P., M.R.C.S., L.M.R.C.P.I., has been appointed Honorary Obstetrician and Gynæcologist to the Parsi General Hospital and Consulting Gynæcologist to the Bacterio-Therapeutic Institute, Bombay.

Dr. James Leslie Watt and Mrs. Watt, of Milbrook, Plymouth, were the recipients the other day of some handsome pieces of silver and an illuminated address as a mark of esteem and respect upon the occasion of their leaving the district for Tavistock.

The will of Sir Francis Richard Cruise, M.D., D.L., K.S.G., of Dublin, Physician-in-Ordinary to the late King Edward, has been proved in the Court of Probate. His personal estate in the United Kingdom amounted to £23,358. He left £500 for charitable purposes.

Professor J. Lorrain Smith, F.R.S., of the University of Manchester, has been appointed by the Home Secretary to be a member of a Departmental Committee to inquire and report what amendment (if any) of the regulations for the spinning and weaving of flax or tow and the processes incidental thereto is expedient in view of the Report of the Departmental Committee on Humidity and Ventilation in Cotton Weaving Sheds or on other grounds.

Alderman Thomas Houghton Waters, M.D., F.R.C.P., of 69 Bedford Street, Liverpool, the "father" of the medical profession in Liverpool, a former President of the British Medical Association, Consulting Physician to the Liverpool Royal Infirmary and the Northern Hospital, first Professor of Medicine in University College, Liverpool, who died in June last, aged 86, left estate of the gross value of £24,070, of which £23,788 is net personalty. He left £100 each to the Liverpool Medical Institution and the British Medical Benevolent Fund.

FRENCH CLINICAL LECTURE

ON

TRACHEOTOMY.

By M. WICART, M.D.,

Prizeman and late Interne of the Paris Hospitals.

[Specially Reported for this Journal.]

The operation of tracheotomy is certainly one that may be described as urgent, but in the adult, at any rate, it is not often absolutely of instant necessity. In a child, no doubt, we may have to operate forthwith should the larynx and trachea be blocked by false membranes, and we are, perhaps, too apt to bear these cases in mind in presence of an adult who happens to be threatened with asphyxia. Adults are liable, of course, to many causes of obstruction of the respiratory passages, foreign bodies may find their way into the larynx or trachea, the walls of the larynx may rapidly swell as the result of inflammatory or congestive œdema, or more slowly in consequence of chronic hyperplasia. Neighbouring organs may press upon the air passages, or the natural sphincter of the larynx may suddenly contract and prevent the ingress of air. Every combination of these conditions is possible, and it is for the practitioner to learn to recognise the necessity for tracheotomy, to distinguish between the indications for mere urgency or extreme urgency, and the advantages or the unnecessary risks attending the intervention when not peremptorily called for.

We must be quite clear in our mind as to these points because the *technique* is very different according as we aim merely at making a hole in a few seconds to allow of the admission of air, or, on the other hand, to restore the ability to breathe in presence of laryngeal stenosis. The results, moreover, are quite different, and the *modus operandi* will vary accordingly.

Choice of the Modus Operandi.—Let us take the case of a subject, age 30, whose condition calls for tracheotomy. The air passages can be laid open at any point in the neck: through the thyroid cartilage, the crico-thyroid membrane, the cricoid, in fact, anywhere in the course of the supra-sternal trachea.

Thyrotomy, *i.e.*, an opening in the middle line at the prominence of the thyroid cartilage, is a delicate operation on account of the nearness of the vocal cords. Nevertheless it is indicated in presence of endolaryngeal tumours, and is essentially one to be performed by a specialist.

Inter-crico-thyroid laryngotomy, incision of the crico-thyroid membrane, is an excellent operation in obese subjects, with a puffy neck, infiltrated with air, and in very urgent cases, provided we have at our disposal a proper set of tracheal cannulæ.

Crico-tracheotomy is an unsatisfactory operation, which presents no advantage over the preceding, and is open to the objection that it involves the destruction of the best support of the laryngeal canal, entails incision of a cartilage which may be ossified, and exposes us to the risk of fracture of the cartilage when we try to force a passage for the cannula.

High tracheotomy is the most serviceable operation for the practitioner. In very urgent cases it is almost as easy to perform as inter-crico-thyroid laryngotomy, and it is the only operation to be recommended in simply urgent cases, *i.e.*, cases in which we have time to decide upon the steps to be taken. We shall, therefore, take this operation as the type for adoption.

Low tracheotomy, known as Trousseau's operation, is rarely called for. It is difficult, by reason of the depth of the trachea behind the sternum and the presence of many large vessels below the thyroid, not to mention the thyroid itself. It is an operation that requires a surgeon for its performance, and we need not discuss it

We will assume that you have just been summoned to a patient who is threatened with asphyxia. Having in a few words ascertained as far as possible the cause of the mischief, you decide forthwith to make an opening into the air passages under the best possible conditions.

You can always attack the same region, with the same landmarks as your guide, in the same position, whatever be the case. The manœuvres only differ in respect of rapidity of execution. They must be done *presto* if death be imminent, if less urgent map out your field of operation quietly, *festine lente*, so as not to add to the patient's risk.

Place the patient on a table so arranged as to get plenty of light on the neck. Slip a rolled sheet under the shoulders at the root of the neck, thus rendering the median line of the neck prominent. Stand on the patient's right while an assistant maintains the chin in the median line, opposite the sternal notch (fig. 1). If the patient cannot breathe lying down seat him in an arm chair with the head thrown back.

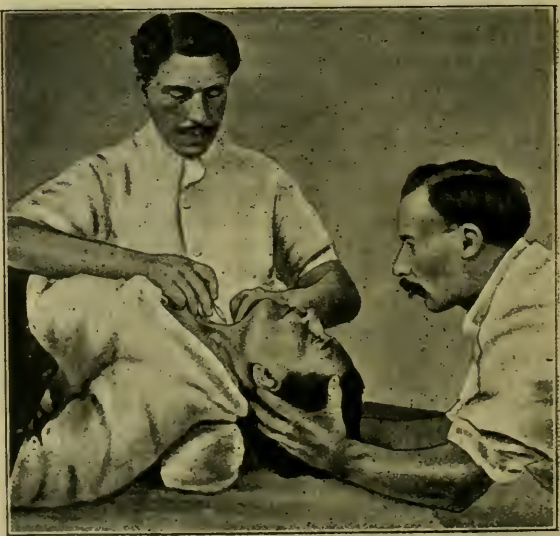

Fig. 1.

Follow the median line with the index finger from the chin downwards (fig. 2), and try to make out the hyoid bone (more hidden than is thought) and Adam's apple, *i.e.*, the apex of the thyroid cartilage, the most prominent of all; make sure of it by running the finger a little lower down. Then for half an inch or so we follow the hard line of the thyroid angle and the cricoid cartilage. Select a spot about an inch and a quarter below Adam's apple and you will be about right. You will know this for certain when you have made your incision.

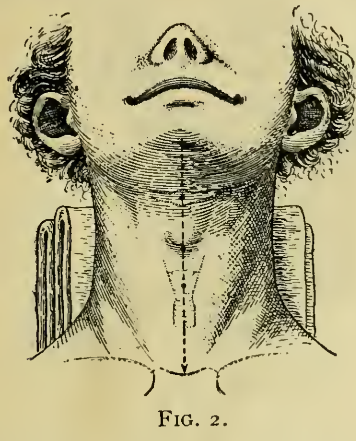

Fig. 2.

The Rapid Operation.—You are called upon to make an opening at once. The hands, instruments and field of operation having been sterilised (if time permit), make a two inch incision over the marked cricoid point down to the laryngo-tracheal canal, but, however pressed for time, always leave the actual opening for a subsequent incision.

Run over the incision with the left index finger, explore the inter-crico-thyroid space, and if it strikes you as sufficient make the opening there, and if your cannula does not pass readily, quickly cut a notch in the upper margin of the cricoid cartilage. If unprovided with a dilator you can push in a Krishaber's cannula with the point downwards, pressing from before backwards while the anterior surface of the cannula pivots on the upper edge of the cricoid.

If the space turns out to be really too narrow, and the cricoid cartilage too resistant, or should it be that (as is most frequently the case in adults) the obstacle is situated just at this level, at once go below the cricoid, make out the rings of the trachea, and cut through one, two or three rings by plunging the point of the knife a tenth of an inch inwards. Leave the finger in contact with the tracheal wound, which should be well in the middle line, if we are to steer clear of disappointment. Slip the point of the cannula past the finger and turn the point downwards. Your left index will tell you whether it has gone in or whether it has merely slipped along the front of the trachea. This often happens in the absence of previous dilatation. Once the cannula is in place the most important step of the operation is over.

The Slow Operation.—This more deliberate operation only differs from the preceding in respect of the time of the incision, but this is all important if we wish to restore the respiratory function and protect the patient against complications (broncho-pneumonia, which is so often fatal).

The patient is placed as in the previous case. Should he be unable to tolerate hyper-extension of the neck in the recumbent position put him on a chair with the head thrown back, but only when absolutely constrained thereto, and this will not often be the case.

This time you will have time to secure perfect asepsis of hands, instruments, etc. Cover the field of operation with a boiled towel in which a hole has been made and then go ahead. The case may be urgent and you are unprovided with chloroform or ether. In any case general anæsthesia is to be avoided whenever possible, especially as local anæsthesia with a 1 in 200 solution of cocaine will answer the purpose. We begin by injecting 1 c.c. of renococaine, a strong solution containing five drops of adrenalin (1 in 1,000) and 1 per cent. of cocaine. This is followed by several other injections of the 1 in 200 cocaine solution. In this way the incision is rendered painless and exsanguineous. This last point is of importance in view of the trouble that may be caused by the passage of blood into the trachea and the hindrance to the different steps of the operation.

Determine the formation of white line, puffed as in nettlerash, about two inches long, that is to say, three-quarters of an inch above the lower border of the cricoid, and an inch and three-quarters below. Wait two minutes, then proceed to make the incision. Start this a tenth of an inch below the upper end of the white line and end it the same distance from the lower end. Cut down forthwith to the connective subcutaneous tissue. We then catch sight of some blue lines, for the skin does not bleed owing to the adrenalin. Cut through these blue lines (veins) between two forceps and tie each end. We now reach the white line of the neck which can be recognised by the two bands of muscle fibres on each side. Cut this through and pull the muscles aside with retractors. All these incisions are the same length as the skin incision. The pre-tracheo-cricoid connective tissue then comes into view with, below, the thyroid gland.

With the left index finger in the wound make out the whereabouts of the windpipe. Above you will feel the thick beak of the cricoid and, still higher up, the cricothyroid membrane with, below, the two first rings of the trachea. The third may seem to you to slip from under the finger, but this is really the thyroid which crosses the trachea at this level.

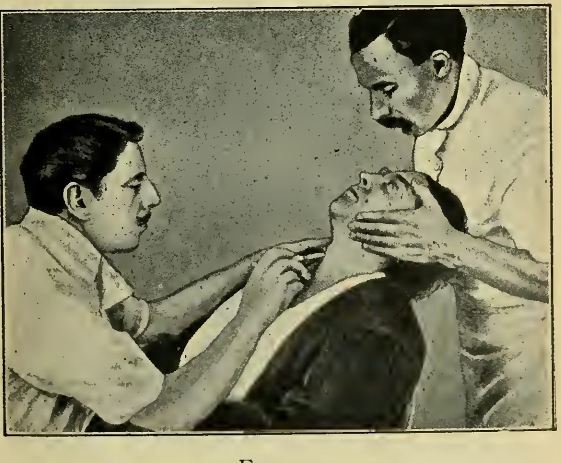

Fig. 3.

Now examine the bottom of the wound, while the tissues are well retracted. Look for and divide any vessels that cross the trachea and tie them at once. Then, with the aid of the grooved director, you free the trachea from its connective tissue and detach and push down the thyroid body. Should the thyroid cover the upper rings, or if it be adherent, it, like its vessels, must be ligatured and cut through.

We will suppose the three first rings to be exposed and there is no bleeding. You may now make your opening. Puncture with a pointed scalpel just below the cricoid. Push the knife in a quarter of an inch and rip open the three top rings.

Air escapes with a whistle and blood and mucus may be violently expelled. Now is the time to keep cool because the patient begins to struggle. Ram the dilator into the tracheal wound and open it out, whereupon you will be able to slip in your cannula, fitted with its plug. Push it well home.

While this is being done the patient again begins to suffocate and you must make haste to withdraw the plug and substitute the inner tube. Breathing then begins again with the characteristic metallic ring. Should this not be so, should you not feel the warm breath coming freely from the tube, beware, for the cannula may have slipped into the connective tissue. Put a mirror to the patient's mouth; if it clouds it means that air is still passing through the mouth and you must once again introduce the dilator and replace the cannula.

Let us assume that everything has gone well and that the tube is in place. The patient is breathing comfortably. Leave him in the recumbent position, in opposition to the usual practice of allowing him to sit up. It is easier for him to get rid of any blood that may have found its way into the trachea. Get your assistant to hold the cannula in place and tie the tapes attached to it at the side of the neck. Do not tie too tightly, nor on the other hand leave any play, otherwise the instrument might become displaced after you have gone.

Now attend to the skin wound. The lower end should be at least as low as the tracheal wound in order to obviate the occurrence of subcutaneous emphysema. Make sure of this before putting in a stitch below the cannula. Then cleanse the wound and its neighbourhood. A double layer of lint, split in its upper half, is slipped under the tapes on either side so as to make a complete dressing (fig. 4). The last step is to provide for filtering the inspired air. Tie a tape round the neck and fold over it a sterilised compress which falls like a bib in front of the tracheal orifice (fig. 5).

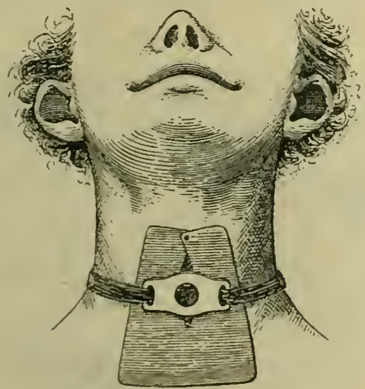

Fig. 4.

Subsequent Measures.—If blood has entered the trachea keep the patient in bed with the head low. Give him a little diluted spirit, and if there be much shock inject some normal saline solution. On the supervention of the slightest indication of bronchial irritation apply hot mustard poultices to the back and front of the chest, and impregnate the air of the room with water vapour containing two teaspoonfuls of the following mixture :—

Tincture of Eucalyptus ...	200 parts.
Tincture of Benzoin ...	50 parts.
Menthol	3 parts.
Camphor	6 parts.

The cannula must remain *in situ* while the skin wound is healing, but the inner tube must be cleansed several times a day with boiled water. In very urgent cases should you not have a cannula handy you can make use of a stout rubber drainage tube for the purpose.

When we judge that the time has come for removing the tube, the patient is encouraged to try the effect of stopping the orifice of the cannula with the finger while breathing or speaking. If satisfactory the cannula is taken out and a dressing is firmly applied to the wound. If, however, do what we will, breathing cannot be rendered easy we must insert a cannula of smaller calibre. The wound takes about a fortnight to heal up.

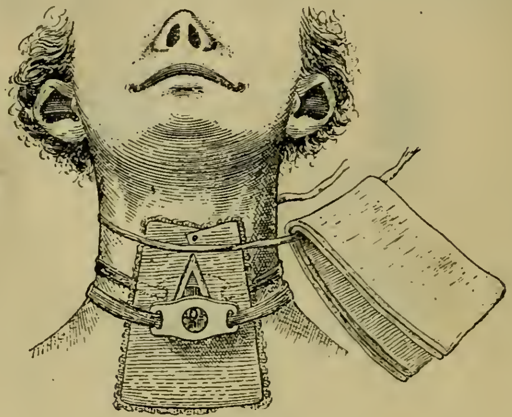

Fig. 5.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal The lecture for next week will be by Alexander Zweig, M.D., Physician to the City Asylum, Dalldorf, Berlin. Subject: "The Treatment of Decubitus."*

ORIGINAL PAPERS.

NOTES ON A SERIES OF CASES OF APPENDICITIS.

By J. JACKSON CLARKE, M.B., F.R.C.S.,
Senior Surgeon to the Hampstead and North-West London Hospital, and Surgeon to the Royal National Orthopædic Hospital.

The following brief notes on a consecutive and inclusive series of cases of appendicitis have been abstracted for me from the hospital notes by Mr. H. W. Littlewood, house-surgeon, and I am encouraged to add to the literature of this much-written-on subject because they enforce the conclusion that only by early operation can the risk of a fatal issue be avoided. The series includes three fatal cases; in one of these—Case XI.—symptoms had existed four days, and diffuse purulent peritonitis was present; in Case XXI, also fatal, symptoms were of four days' duration, and diffuse purulent peritonitis was also present. In the third fatal case—XXV.—there was a circumscribed abscess, but many adhesions were present, and intestinal obstruction set in, and was not relieved by lateral anastomosis. Every patient who was operated on early recovered, and some who were in a desperate condition of general peritonitis also recovered. The subject of appendicitis is so well-worn that, beyond insisting on operation at the earliest possible moment after the onset of symptoms, technical details are uncalled for. Mention may, however, be made of the ease with which a swab may be left in the abdomen. To obviate this, I have used for years past for private work an operation set of dressings, made according to my directions by Mr. Martindale, of 10 New Cavendish Street. This contains rolls of gauze for packing around areas suspected of containing pus, and to the end of these rolls, which is left emerging from the wound, a pair of catch forceps is attached.

Large gauze swabs for holding back coils of intestine have a long piece of tape attached; this tape hangs out of the operation wound, and to it catch forceps are attached. Since the accidental inclusion of a gauze roll in Case IX. these details have been made part of the routine at the hospital.

Case I.—Acute Appendicitis. C. S., female, æt. 9. Dec. 2nd, 1910. *History:* Vomiting, 2 days. Pain in R. I. fossa soon after onset, of a colicky nature. Slight constipation. Pain during micturition. *Signs:* Tenderness, rigidity in R. I. fossa. No distension. T. 99.8°. P. 104. *Operation:* Ether; as soon as possible. An incision was made over the appendix, which was gangrenous. No perforations were present and no pus. A drainage tube was put in. *After-course:* Continuous rectal saline. There was slight purulent discharge from the tube until Dec. 14th, when the tube was removed. *Result:* Cure. Left hospital on Jan. 1st, 1911.

Case II.—Subacute Appendicitis. J. S., male, æt. 12. Dec. 21, 1910. *History:* Acute abdominal pain, especialy in R. I. fossa, 5 days. Vomiting. Pain passed off next day, but began on the day following, lasting to admission. Bowel constipated. No vomiting for four days. *Signs:* Deficient movement on R. side of abdomen, rigidity and tenderness over McBurney's point. T. 101°. P. 100. *Operation:* Ether; same day. Incision over appendix, which was found to be thickened and adherent at its tip, but not acutely inflamed. Removal. No drainage. *Course:* Dec. 22 much frothy sputum; acute bronchitis. Small tuberculous focus in R. apex. *Result:* Cure. Discharged Jan. 14th, 1911.

Case III.—Acute Appendicitis. A. C., female, æt. 27. Feb. 6th, 1911. *History:* Similar attacks on May 1st, Dec. 10th and Dec. 27th, 1910. Occasional mild attacks of pain since Dec. 27. Bowels relaxed. Vomiting. *Signs:* Slight tenderness, rigidity in R. I. fossa. T. 98.4°. P. 80. *Operation:* Ether; Feb. 8. The usual appendix incision. The appendix was found to be closely adherent to the cæcum. It was freed, the stump crushed, and the organ removed. *Course:* Frequent retention of urine after operation. *Result:* Cure. Discharged March 1st, 1911.

Case IV.—Appendix Abscess. F. B., female, æt. 27. Feb. 24th, 1911. *History:* Pain round umbilicus, constant with exacerbation, 9 days ago. Nausea. Constipation. Pain moved to R. I. fossa next day, where it remained. *Signs:* Tongue dry and coated. Deficient movement of R. rectus. Tenderness and rigidity in R. I. fossa. Distension of lower abdomen. Distinct small lump in R. I. fossa. T. 101°. P. 76. *Operation:* Same day. Gridiron incision. Large amount of pus (very offensive). Marked thickening of cæcum, with abscess below and to the outer side. Appendix not seen. No fæcal matter. Peritoneum dried and two tubes through the wound, one to abscess, the other to pouch of Douglas. *After-treatment:* Rectal saline, morphia. *Course:* Offensive discharge for eighteen days. *Result:* Cure. Discharged March 22nd, 1911.

Case V.—Acute Appendicitis. Local Peritonitis. A. B., female, æt. 50. Feb. 24th, 1911. *History:* Pain of sudden onset 1 day. Nausea, but no vomiting. *Signs:* Marked tenderness, rigidity and distension over whole abdomen. Pain worse in R. I. fossa. Patient declined operation. T. 100°. P. 104. *Treatment previous to operation:* Water only by mouth, enemas, the first of which brought away scybalæ. Patient then became much worse, vomiting much bile-stained fluid on two occasions. *Operation:* CE, ether, open; Feb. 25th, 4.30 p.m. A small median incision, from which a small amount of pus escapes. A second intra-muscular incision was made over the appendix. More free pus was found. The appendix was not removed; large drainage tubes placed in pelvis and in lateral wound. *After-course:* Bowels moved well after enema on fourth day. *Result:* Wounds healed by March 22nd, and patient left hospital on April 18th.

Case VI.—Acute Appendicitis. A. L., male, æt. 11. March 2nd, 1911. *History:* Said to have swallowed a whistle a week ago. Twenty-four hours' abdominal pain, generalised, tenesmus and bloody stools. *Signs:* Tenderness and rigidity in R. I. fossa. A small lump was felt in this region. Whistle said to have been seen by X-ray. T. 98.8°. P. 86. *Operation:* $CHCl_3$ + ether; same day. Incision over appendix, which was found to be inflamed and on the point of perforation. It was removed and the abdomen closed without drainage. *After-course:* Uneventful. *Result:* Cure. Discharged March 25th, 1911.

Case VII.—Appendix Abcess. M. G., female, æt. 16. March 7th, 1911. *History:* Pain and tenderness in appendix region for 4 days, worse for 24 hours. Bowels open. No vomiting. (Two former attacks.) *Signs:* Great tenderness in R. I. fossa and R. loin. Slight fulness. Rigidity over R. rectus. T. 101°. P. 108. *Operation:* CE; same day. Incision over maximum tenderness. Peritoneum injected and adherent. Pus was found behind the cæcum. The abcess was swabbed out, the appendix being then found œdematous, inflamed and very friable. Three-quarters of an inch was removed without ligature, and the rest was found inaccessible. A drainage tube was passed to the abscess cavity. *After-course:* Drainage for eleven days. *Result:* Cure. Discharged March 30th, 1911.

Case VIII.—Acute Appendicitis; Peritonitis (local). W. C., male, æt. 6. March 21st, 1911. *History:* 24 hours' sudden acute abdominal pain. Vomiting. Bowels open with enema. *Signs:* Marked abdominal tenderness, especially over the appendix. Rigidity of R. rectus. T. 103°. P. 144. *Operation:* Same day. Incision over the appendix. A few beads of pus were found in the general peritoneal cavity. An inflamed perforated appendix was removed and the stump carbolised. A tube was put to the root of the appendix. *After-course:* 23 days discharged. *Result:* Cure. Discharged April 14th, 1911.

Case IX.—Appendix Abscess; Fæcal Fistula. E. D., male, æt. 27. March 26th, 1911. *History:* Several previous attacks. Three days ago general abdominal pain, which shifted to the appendix region. Vomiting at onset. Constipation. Pain on micturition 24 hours. *Signs:* Abdomen moves badly. Tenderness, rigidity, distension, and a flat note in the appendix region. T. 101°. P. 94. *Operation:* Ether; same day. Incision over appendix. Peritoneal adhesions. Cæcum much injected. The appendix, which was markedly inflamed and perforated, was behind the root of the mesentery and very inaccessible. There was an abcess cavity containing 4 ozs. of most offensive pus. The appendix was clamped and removed. Two drainage tubes. *After-course:* Two sinuses were left by April 28th. From the upper of these there was an occasional discharge of sanious pus. On May 13th three small sutures were removed from the sinus; on May 15th a gauze swab, which had been left behind at the operation, was found in the depth of the wound. On May 31st blood appeared in the motions and diarrhœa followed irrigation of the wound. From June 1st to June 7th a small fæcal fistula was present. *Result:* Two dry pin-hole sinuses on discharge on July 10th, 1911.

Case X.—Acute Appendicitis. E. J., female, æt. 46. April 5th, 1911. *History:* Three days ago a sudden, severe pain in the R. I. fossa, with vomiting and constipation. (Several similar attacks previously.) *Signs:* Tenderness higher than usual in R. I. fossa. Rigidity. T. 99.7°. P. 104. *Operation:* Next day. Incision through R. rectus below umbilicus. Very fat subject. Inflamed appendix, with ulceration of the tip. A concretion in its middle. It was ligatured and removed, and the stump carbolised and invaginated. No drainage. *After-course:* Uneventful. *Result:* Cure. Discharged April 28th, 1911.

Case XI.—Acute Appendicitis; Gen. Peritonitis. J. S. male, æt. 10. April 10th, 1911. *History:* 24 hours' abdominal pain. Vomiting. Bowels open. (Pain after eating ice-cream four days ago.) *Signs:* Poor movement. Tenderness, rigidity, and a small lump were found in R. I. fossa. Appearance very toxæmic. T. 103°. P. 128. *Operation:* $CHCl_3$+ether; at once. Incision over lump. Free pus in peritoneal cavity. An abscess was found on the outer side of the cæcum, and the appendix was found to be red, swollen, perforated, and containing two concretions. It was removed. Tubes to appendix and the pelvis. *After-course:* Continuous rectal saline. Delirium. Frequent vomiting next day, and rigidity, but no distension. Patient gradually sank and died on April 27th, 1911. *Post-mortem:* Diffuse purulent peritonitis.

Case XII.—Acute Appendicitis. L. C., female, æt. 56. April 23rd, 1911. *History:* Seven days' pain in R. I. fossa, worse for three days. Vomiting once three days ago. Constipation. *Signs:* Tenderness and rigidity over appendix. A distinct lump can be felt. T. 101.8°. P. 130. *Operation:* $CHCl_3$. Same day. Incision over lump. Lymph and turbid fluid found in peritoneal cavity. The appendix was long, inflamed, œdematus, kinked on itself and adherent at its tip. It was removed. Many peritoneal adhesions. A tube was left in. *After-course:* Uneventful. *Result:* Cure. Discharged May 24th, 1911.

Case XIII.—Acute Appendicitis. Gen. Peritonitis. W. H., female, æt. 13. May 2nd, 1911. *History:* Abdominal pain 9 days. Sudden collapse to-day. *Signs:* No respiratory movement of abdomen. General rigidity more marked in R. loin and R. I. fossa. General tenderness. T. 104.4°. P. 124. *Operation:* Same day. A vaginal examination was negative. Incision over McBurney's point. A little pus and coffee-coloured serum escaped. Odour suggested B. Coli. One tube was inserted. Child was returned to ward. *Course:* Propped up in bed. Next day the pulse was 120. Temperature 98.6. No pain. Good movement of upper abdomen. Some dulness on R. side. At 5 p.m. of the same day she again became rapidly worse. General rigidity and tenderness. T. 102°. P. 120. *Second Operation:* One median, two lateral incisions, with posterior counter openings, and another opening in L. lower abdomen. The lesser sac was also opened. Pus was present everywhere but in the lesser sac. The appendix was found and removed. There was a perforation near its free end. *After-course:* Pituitary Extract 10m., morphia, rectal and then subcutaneous saline. On May 5th the tubes were changed for smaller ones under an anæsthetic. Hot saline irrigation of peritoneum and bowel. The tubes were irrigated twice daily until May 23rd, and all tubes were out on June 1st. *Result:* Cure. Discharged June 15th, 1911.

Case XIV.—Appendicitis; Salpingitis. E. H., female, æt. 43. May 22nd, 1911. *History:* "Sent up as acute appendicitis." *Signs:* Tenderness and rigidity in R. I. fossa. T. 101.2°. P. 104. *Operation:* The appendix was found, on immediate operation, to be surrounded by a few adhesions. The R. Fallopian tube was found to be distended with blood, and, on being clamped, tore off close to the uterus. The distal end was too adherent for removal, and a piece of gauze was put down to the cut end, and left *in situ,* together with a large drainage tube, and the wound closed. *After-course:* Vomiting and flatulence, relieved by turpentine enemata and rectal irrigation. *Result:* Cure. Discharged June 27th, 1911.

Case XV.—Acute Appendicitis. R. S., male, æt. $3\frac{1}{2}$. May 31st, 1911. *History:* Twelve hours' acute abdominal pain, vomiting, and the passage of blood and mucus per rectum. A definite swelling was felt under the liver by the doctor who first saw him. *Signs:* R. I. fossa seemed empty, but no tumour was felt elsewhere. There was some fulness on rectal examination and bright red blood was found on the finger-stall. T. 100.3°. P. 134. *Operation:* $CHCl_3$ + CE; at once. A highly inflamed appendix was found and removed, but no sign of intussusception. *After-course:* Some stitch suppuration, but otherwise uneventful. *Result:* Cure. Discharged June 14th, 1911.

Case XVI.—Sub-acute Appendicitis. T. R., male, æt. 48. June 14th, 1911. *History:* Two days' R.-sided severe abdominal pain, chiefly at distal border. *Signs:* T. 99.1°. P. 76. R.-sided tenderness. *Course:* In bed and on light diet for a week; pain diminished. A fortnight after admission, pain (of a mild, constant nature) moved to R. I. fossa. Leucocyte count 5,200. *Operation:* $CHCl_3$ + CE; incision over appendix. Very fat subject. The cæcum was inflamed. The appendix was congested, with a few adhesions, and contained a small terminal concretion. It was removed. No drainage. *After-course:* Sub-articular suture yielded. *Result:* Cure. Discharged July 22nd, 1911.

Case XVII.—Appendix Abscess. D. N., female, æt. $3\frac{1}{2}$. July 2, 1911. *History:* Vomiting ten days ago. Abdominal pain eight days. Slight diarrhœa. *Signs:* Slight rigidity of R. side. Tenderness in R. I. fossa. Under an anæsthetic a moderate swelling could be felt. T. 101°. P. 160. *Operation:* CE + ether; at once. An incision over McBurney's point gave exit to a large amount of foul pus. An abscess cavity, in which was found concretion $\frac{1}{2}$ in. by $\frac{1}{4}$ in., was drained, without search for the appendix. *After-course:* Glucose saline per rectum. Fowler position. *Result:* Cure. Discharged July 25th, 1911.

Case. XVIII.—Acute Appendicitis. E. P., male. æt. 16. Sept. 6th, 1911. *History:* Twelve hours' pain in R. I. fossa, with headache and sore throat. No vomiting. *Signs:* Rigidity and tenderness over lower part of R. rectus. T. 103°. P. 100. *Operation:* CE + ether. An inflamed appendix, round which were a few adhesions, was removed, and the abdomen closed without drainage. *After-course:* Uneventful. *Result:* Cure. Discharged Sept. 25th. 1911.

Case XIX.—Sub-Acute Appendicitis. E. T., female, æt. 28. October 5th, 1911. *History:* Six hours' general pain of sudden onset. Vomiting on evening before admission. *Signs:* No local symptoms, but slight rigidity of R. rectus. T. and P. normal. At 15 hours from admission, definite tenderness in R. I. fossa. *Operation:* $CHCl_3$, CE. At once. A slightly injected appendix with recent adhesions was removed. A connection was found in its tip. No drainage. *After-course:* Uneventful. *Result:* Cure. Discharged October 26th, 1911.

Case XX.—Gangrenous Appendix, General Peritonitis. T. H., male, æt. $8\frac{1}{2}$. October 24th, 1911. *History:* Twenty-four hours' occasional vomiting. Sudden general pain one hour. Pain in R. testicle. *Signs:* Face anxious. Thoracic breathing. Slight distension, with tenderness and pain round umbilicus and over R. scrotum. Per rectum a slight bulging behind. T. 98.4°. P. 156. *Treatment:* Enemata and fomentations. No vomiting, decrease of pulse rate. *Operation:* Ether 26 × 12. Batter's incision. Free foul pus was found. The appendix was gangrenous and perforated. No adhesions. Removal. Five tubes were put in. Saline irrigation. *After-course:* Two hourly irrigation. Continuous rectal saline. Some vomiting. *Result:* Cure. Discharged November 28th, 1911.

Case XXI.—Gangrenous Appendix. General Peritonitis. A. G., male, æt. 24. October 25th, 1911. *History:* Vomiting four days ago, which had gone off next day, to reappear on admission. General pain four days. Constipation. *Signs:* No movement. Rigidity and intense tenderness, especially at umbilicus. T. 100°. P. 154. *Operation:* CE + ether. Five hours after admission. Foul free pus. An appendix converted into a greenish slough, was removed. Openings and counter openings, seven in all. Irrigation with saline. *After-course:* Continuous saline and glucose. In spite of a temporary improvement, patient ultimately sank. *Result:* Death, October 31st, 1911.

Case XXII.—Appendix Abscess. C. H., male, æt. 25. November 23rd, 1911. *History:* Three days' pain in upper part of abdomen, with sickness. Taken to a home on the third day, and for the six days following was better. Transferred to hospital. *Operation:* CE + ether. 9th day. A well-localised appendix abscess was found. The appendix, which was gangrenous, was removed. The mesentery was sloughy, and much capillary oozing was present. Counter opening on right and drainage. *Treatment:* Morphia. Continuous saline and glucose, and the Fowler position. *Result:* Cure. Discharged January 1st, 1912.

Case XXIII.—Recurrent Appendicitis. M. H., female, æt. 31. Dec. 10th, 1911. *History:* Many previous attacks extending over four years. Eight days' pain in lower abdomen of sudden onset. Vomiting. Constipation. Pain gradually, but severely. *Signs:* Some tenderness in R. I. fossa. T. 98.4°. P. 98. *Operation:* Ether; at once. 1 in. incision. The appendix was removed, and the wound closed without drainage. *Result:* Cure. Discharged Jan. 7th, 1912.

Case XXIV.—Recurrent Appendicitis. E. H., female, æt. 33. Dec. 11th, 1911. *History:* Previous attacks. Slight pain in R. I. fossa for three weeks. Constipation. *Signs:* Tenderness, rigidity general, especially marked over appendix. T. 99.8°. P. 96. *Operation:* CE, ether. The appendix was found to be congested, and contained several irregular, hard, black concretions. *After-course:* Uneventful. *Result:* Cure. Discharged Jan. 8th, 1912.

Case XXV.—Appendix Abscess; Int. Obstruction. A. F., male, æt. 5. Dec. 14th, 1911. *History:* Eight days' acute pain of sudden onset. Vomiting. Constipation. Pain on micturition. *Signs:* Tenderness and absence of movement all over. Rigidity on R. side. A swelling was felt per rectum. T. 100°. P. 100. *Operation:* Ether; at once. Median incision. Peritoneal adhesion. Circumscribed foul pus found. Appendix not seen. *After-course:* Continuous rectal saline. The condition improved for thirteen days, when signs of peritonitis appeared. *Second operation:* Dec. 28th. The appendix was found. Very inflamed. It was removed and the stump carbolised. No peritonitis, but some enteritis. *After-course:* Signs of consolidation in left lower lobe next day. Vomiting set in, and on Jan. 2nd, 1911, complete obstruction was found, with fæcal vomit. *Operation:* Same day. A lateral anastomosis was made, but did not relieve the vomiting. *Result:* Death, Jan. 2nd, 1911.

Case XXVI.—Acute Appendicitis. M. C., female, æ. 22. Dec. 22nd, 1911. *History:* Several attacks previously. Twenty-four hours' acute pain of sudden onset. Vomiting marked. *Signs:* Great tenderness in R. I. fossa. Rigidity. T. 99°. P. 94. *Operation:* Ether; next day. No pus. Appendix very swollen and on the point of perforation. Few adhesions. Tube in loin. *After-course:* Uneventful. *Result:* Cure. Discharged Jan. 20th, 1912.

Case XXVII.—Sub-acute appendicitis. G. B., male, æt. 30. Feb. 8th, 1912. *History:* One week constipation, with pain in lower abdomen. *Signs:* Tongue dirty. Tenderness and rigidity in R. I. fossa. T. 98.4°. P. 68. *After-course:* After five days tenderness in R. I. fossa was the only symptom. Operation was suggested. but refused by the patient. *Result:* Cure. Discharged Feb. 14th, 1912.

Case XXVIII.—Acute Appendicitis. C. H., male. æt. 54. March 30th, 1912. *History:* One previous attack. Two days' general pain, especially in R. I. fossa. Pain at beginning of micturition. *Signs:* Slight tenderness and very slight rigidity in R.I. fossa. Movement fairly good. T. 100.8°. P. 66. *Operation:* Within 3 hours. A gangrenous and perforated appendix was found, with a concretion loose in peritoneal cavity. Flakes of lymph, but no pus. Removal and inversion of stump. Drainage. *After-treatment:* Continuous saline. Fowler position. *Result:* Cure. Discharged April 23rd, 1912.

Case XXIX.—Recurrent Appendicitis. M. M. female, æt. 27. April 2nd, 1912. *History:* Four previous attacks. Pain in R. I. fossa, with vomiting and constipation beginning three weeks ago. *Signs:* Slight tenderness in R. I. fossa. T. 99°. P. 100. *Treatment:* Rest in bed, with light diet for eight days. Tenderness disappeared. *Operation:* Intravenous ether. Old adhesions between appendix, cæcum, surroundings were found. The organ was removed and the stump inverted. No drainage. *Result:* Cure. Discharged May 1st, 1912.

Case XXX.—Acute Appendicitis. C. B., female, æt. 19. April 25th, 1912. *History:* One previous attack. 36 hours' abdominal pain, especially in R. I. fossa, with vomiting, pain on micturition and constipation. *Signs:* Tenderness and rigidity in R. Iliac fossa. No mass. T. 100.2°. P. 112. *Operation:* Battle's incision. A very friable, almost gangrenous appendix, without perforation. Ligature with silk and removal. Many recent adhesions. Large drainage tube. *After-course:* A sinus was left for four weeks. Marked hysteria. *Result:* Cure. Discharged May 24th, 1912.

Case XXXI.—Acute Appendicitis. C. B., male, æt. 25. May 6th, 1912. *History:* Three days' pain in R. I. fossa, with vomiting. *Signs:* Tenderness in R. I. fossa, with rigidity. T. 98°. P. 96. *Operation:* C.E., same day. The pelvis was found full of thin pus. The appendix was swollen and soft. It was removed. Drainage of stump and also of recto-vesical pouch. *Result:* Cure. Discharged June 15th, 1912.

Case XXXII.—Sub-acute appendicitis. C. W., female, æt. 18. May 10th, 1912. *History:* Two previous attacks. Ten days' pain in R. I. fossa, with slight constipation. *Signs:* Tenderness and rigidity over limited area in R. I. fossa. T. 99.8°. P. 80. *Treatment:* Rest for twelve days, with light diet. Tenderness disappeared. *Operation:* Intravenous ether; usual oblique incision. The appendix was injected with a few filmy adhesions, and contained a small concretion. It was removed, with inversion of the stump. *After-course:* Next morning a catheter specimen of urine showed presence of blood in fair amount. This continued for forty-eight hours and then ceased. No other symptoms. Microscopically, corpuscles were present. *Result:* Cure. Discharged June 10th, 1912.

Case XXXIII.—Acute Appendicitis. A. B., female, æt. 28. May 10th, 1912. *History:* Thirty-six hours' severe pain in R. I. fossa, with vomiting. Constipation and pain on micturition. *Signs:* Dirty tongue. Tenderness and rigidity in R. I. fossa, extending just across mid line. T. 100.8°. P. 108. *Operation:* CE; at once. Free pus of a yellow colour was found. The appendix was gangrenous, but showed no perforation. It was removed and a cuff of muscular coat drawn over the stump. Drainage of the stump and pouch of Douglas. *After-course:* Uneventful. *Result:* Cure. Discharged June 8th, 1912.

A CASE OF THE HEROIN HABIT. (*a*)

By J. ODERY SYMES, M.D.,
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Heroin, or diacetyl morphia, is chiefly used in this country as a sedative in cases of troublesome cough, and is generally given as the hydrochloride in a mixture. I am informed, however, by Messrs. Burroughs and Wellcome that it is largely used at the present time hypodermically, chiefly, I imagine, for the relief of pain or the control of asthma. It is desirable, therefore, that medical men should know that there is a grave risk of a patient using this drug contracting a heroin habit similar to the morphia habit. Several French writers (*b*) have drawn attention to this point, and from their experience with cases of heroin mania they are convinced that the effects of this drug are more profound than those of morphia, and that the suppression of the habit is more difficult, more dangerous, and more painful.

Duhem, who reports upon seventeen cases of heroin mania, says that in the process of cure the chief danger is that of respiratory failure, which comes on without any preliminary failure of the heart. Respiratory failure is particularly apt to occur in cases in which the drug is withdrawn too rapidly. Amongst other symptoms during the period of cure he notes hallucinations and delirium, periods of emotional excitement, sleeplessness, headache, generalised pain, and the very slow return to normal health and weight. The dose of heroin in the cases reported varied from 1 to 5 grains a day.

A case has recently come under my care in which the patient was supplied by a medical man with a hypodermic syringe and a supply of heroin hydrochloride tabloids to be used for the relief of pain, and was assured there was no danger of contracting a habit from its continued use. The patient, a lady of 39 years of age, whilst staying at a well-known spa, was seized with neuritis in the right arm. As other remedies failed to give relief, the doctor gave a hypodermic injection of 1-12th grain of heroin hydrochloride, and directed that the nurse should repeat the dose whenever the pain recurred. The first effect of the injection was to relieve the pain, but half an hour later vomiting commenced and continued during the night. This was late in 1906. As the pain continued, the injections were repeated, first by the doctor, then by the nurse, and later by a relative, and the dose was gradually increased to $\frac{1}{4}$ grain three or four times a day. During the next two years the patient made ineffectual attempts to break off the habit. In 1907 she learned to use the hypodermic syringe herself. From this time the habit gradually became more confirmed, and the dose increased, until at the time of her breakdown, in October, 1911, she was taking between 4 and 5 grains in the twenty-four hours. The daily allowance never exceeded 5 grains.

With regard to the effects of the drug, I cannot do better than describe some of these in the patient's own words, for she is an observant woman of education and refinement. Even after the first dose there was "a feeling of excessive fidgetiness, which seemed to creep right up from the very lowest part of the body (the womb), making me so terribly restless that I could not keep my legs still for a moment. This particular feeling increased maddeningly until I had the injection again, when I felt immediately relieved and blissfully comfortable for about $2\frac{1}{2}$ to 3 hours." It was the recurrence of these feelings which led to the repetition of the drug throughout. Gradually the patient's health began to fail; she became thinner, less able to take physical exertion, depressed and seedy. The appetite was very poor, and she noticed a peculiar salt taste in the mouth when the drug was withheld; occasionally she had attacks of vomiting, and constipation was most troublesome. The catamenia became at first irregular and scanty, and finally ceased. She had never been a good sleeper, but since taking heroin this had become much worse, and she had recourse to drugs (chiefly veronal) to induce sleep. If the interval between the injections of heroin was too long she "felt wretchedly fidgety and uncomfortable, and people and things seemed to go farther from me as I looked at them, and at times I felt almost lightheaded." If the dose was increased too rapidly it gave rise to palpitation and excitement. Amongst other symptoms noticed were increased sensibility to sounds and loss of recuperative power after small injuries, such as cuts; another most troublesome symptom was difficulty in starting micturition. There were never any symptoms of respiratory failure, oppression of breathing, etc. The patient says that whilst taking the drug (although previously extremely subject to colds) she never sneezed or coughed, nor did she ever catch a cold during the whole five years.

The relief given by the injections was instantaneous, but these had to be repeated at shorter and shorter intervals. The patient describes herself as having felt "bucked up," both physically and mentally, keener sensed, calmer, happier in mind, and more ready and able to undertake the exertion entailed by golf, bicycling, roller skating, or walking immediately after taking the drug. There was no marked mental or moral failure. Finally, in October, 1911, when taking about 5 grains of heroin a day, she was seized with a violent attack of vomiting and prostration with alternately shivering and perspiring. She was unable to move from her bed, and the habit being discovered, an attempt was made to break it off by gradually tapering the dose. Six weeks from the commencement of treatment the dose had been reduced from 5 grains to 4-50th of a grain a day. The chief difficulties had been sleeplessness, restlessness, emotional outbreaks, tachycardia, loss of appetite and prostration. The patient was at the time walking out of doors, and the mental condition was normal. Any attempt to reduce the heroin beyond 4-50ths of a grain, although unknown to the patient, gave rise to great discomfort and increased emotional excitement. I therefore substituted $\frac{1}{8}$th grain of morphia twice a day, and decreased this amount

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(*a*) Read at a meeting of the Bath and Bristol Branch of the British Medical Association, March 25th, 1912.

(*b*) Duhem, *Progres med.*, 1907, xxiii. 113; *Tribune med.*, July 1st, 1905.

daily. With the substitution of morphia the restlessness disappeared, and by the end of the eighth week hypodermic injections of sterile water only were employed. During the last week of the cure she suffered from a severe cold, the first for five years.

At the present time, six months from the commencement of the cure, the patient is in splendid health, and professes to have no craving for the drug. Sleeplessness, which has been a troublesome symptom throughout the cure, is relieved by the use of adalin, and this drug is still occasionally used.

PSYCHOGENESIS AND INTERNAL SECRETIONS: EXPERIMENTAL DATA AND PATHOGENESIS.

By TOM A. WILLIAMS, M.B., C.M.Edin.,

Neurologist to the Epiphany Dispensary, Washington; Foreign Corresponding Member of the Neurological Society of Paris, and of the Psychological Society of Paris, &c.

We know very little with certainty about the pathology of hyperthyroidism or disorders of the adrenal system.

The importance of rest in the treatment of these cases is emphasised by most writers, as the conditions present are supposed to depend upon overstrain.

Now, it is very evident that it is not physical overstrain that is meant. That mental overstrain can produce these syndromes I very much doubt; but that emotional overstrain may be the prime factor in such cases is an explanation to be seriously thought of, in view of the experimental facts which follow.

It has recently been shown, through a brilliant experimental research by Cannon, of Boston, that the emotion of fear in animals is capable of stimulating the flow of adrenal secretion. He demonstrated that in frightened animals the blood from the adrenal vein is so rich in adrenal substance as to be capable of inhibiting peristalsis in an isolated strip of intestinal muscle. This is due to the presence, in appreciable amount, of adrenal substance, since contact of the latter, in a 1 :1,000,000 solution, with the intestinal strip will also inhibit peristalsis.

We knew that the emotion of fear could inhibit gastric secretion; and Pawlow has show that certain emotions of anticipatory joy can induce a flow of this secretion. Crile has shown, experimentally as well as clinically, that the emotion of fear increases the thyroid secretion; he demonstrated this clearly in certain cases—not necessarily, however, in normal individuals.

Although we have been in the habit of regarding the autonomic nervous system as rigidly autonomic, these experiments show that the sympathetic fibres are somewhat under cerebrospinal control, because in each of the experiments the autonomic symptoms have occurred in virtue of the impressions upon the cerebrospinal nervous system.

It is reasonable to suppose that fear, which, when acute, such experiments have shown capable of exciting the autonomic nervous system and the glands thereto attached, may, when it takes the form of a chronic fear, also produce, less abundantly but to an extent clinically manifest, an overaction of the autonomic nervous system and through it of the glands it controls.

It is our duty to investigate the chronic notion of fear, which we call anxiety, stress, or propossession, in the genesis of cases of hyperthyroidism and also of hyperadrenalism not due directly to morbid action of the adrenal bodies. I have seen cases of Addison's disease in which the only traceable ætiological factor was prolonged stress, and in which autopsy showed no disease whatever, but merely an atrophy of the adrenal-gland substance. The condition may have been congenital, but the fact remains that prolonged stresses have been shown to exist in each case I have seen. Perhaps these cases are homologues of those where hypoplasia follows hyperactivity of the thyroid gland as described by Wilson. Their prolonged anxiety, demanding much adrenal juice for its pressor effect, would lead to eventual exhaustion of the gland and the hypoplasia found *post mortem* in my cases. In these low-pressure cases, adrenal substance has been beneficial in my hands. But a wise hygiene and more especially a sane psychotherapy are also required to prevent continued exhaustion. Such cases can later remain well without taking adrenal when properly re-educated.

Thus, additional clear, physical intercorrelations of mind and body have been experimentally demonstrated, giving rise to inferences which explain what was formally conceived of so vaguely. From these it will not be difficult to evolve practical means for the relief of suffering and the cure of disease. The scientific psychotherapy which depends on them differs vastly from the crude rule of thumb of the suggestionist. The latter is really no better than the amateur of psychotherapy, whether lay or clerical, who does so much harm with false ideas.

CLINICAL RECORDS.

THE ACUTE SHEDDING OF HAIR IN CERTAIN CIRCULATORY DISORDERS.

By DAVID WALSH, M.D.Edin.,

Senior Physician, Western Skin Hospital, London.

The rapid shedding of the hair of the scalp is a subject of which the pathology is still obscure, or, perhaps, one might say with equal justice, is unknown. It is almost invariably connected with some gross failure in the general health, but in some cases it is difficult to say what particular system is at fault. Everyone knows how the hair is apt to fall in cases of diabetes, less rarely in tuberculosis, and commonly in cancer. I have seen a middle-aged woman suffering from extensive cancer *en cuirasse* who could pluck away the hair from her arms at the lightest touch, very much in the way that hair is loosened after exposure to an X-ray tube. Curiously little, by the way, is known as to the destructive action of the focus-tube upon the hair follicles. Nor have we any more definite and satisfactory pathology for the loss of hair in secondary syphilis, but are usually content to refer the phenomenon generally to toxic influences, much as we do in the case of cancer, diabetes and the acute fevers.

In a large number of cases of premature baldness there is evidence of local mischief, such as seborrhœa, to account for the process. Where no such obvious local condition is present, one has to look for explanation in other directions.

There is little doubt that constipation exerts a powerful predisposing or exciting element in the shedding of hair. In this case, however, the toxic theory, pure and simple, fails to cover the whole of the ground. It is easy to understand that the blood may be charged with bowel toxins, but it is not at all clear why they should exert a selective action inimical to the nutrition of the hair-bulb, which, after all, is of an infinitesimally small scale. In approaching this subject it has always seemed to me that in this particular case we were probably attributing to the blood far more power of positive mischief than that to which it was entitled. There can be little question as to the perverted nutrition of the hair-bulb or hair-root, but may not atrophy have resulted from quantitative rather than from qualitative changes in the blood-supply? In other words, may not the damaged nutrition of the hair follicle and the hair-bulb result from a lessened or interrupted local circulation?

The vicious circle, in my opinion, which is set up in the acute alopecia is somewhat as follows:—The bowel toxins enter the general circulation, where they give rise to anæmia and eventually to the feeble circulation associated with chronic constipation; probably arising ultimately from weakening of the heart muscle. The result is shown in the peripheral circulation and, naturally enough, in the hair follicles and bulbs, which represent some of the finest, if not the finest, capillary endings. The sudden stoppage of nutrition is quickly registered in the dry and shrunken hair-bulb, which is ready to fall out from the follicle with little or no provocation. Or if it be retained for a time by reason of its mechanical interlocking in the upper part of the hair follicle, the failure of nutrition is shown by the changes in the hair-shaft, which becomes dry, brittle and often split at the ends.

The chain of events is probably as follows:—The bowel produces the toxin, which, by reason of stagnation of the bowel contents, is absorbed into the blood-stream; the heart muscle undergoes more or less degeneration, following upon the secondary anæmia and direct and indirect toxic action; the surface circulation suffers, and with it the vascular supply to the hair follicles. The hairs shrivel and fall in consequence. Many acute fevers are attended or, rather, followed, by acute loss of hair. In this sequence of events the primary organ at fault is, in my opinion, probably the heart, the muscle of which has been weakened by the high temperature and by toxic fever products.

The whole subject of the premature loss of hair is ill understood. It has always seemed to me that a common factor is the diminution of the capillary field consequent on undetected failure in the central circulation. This atrophy and disappearance of the surface capillaries is a marked feature in the shrivelled, senile skin. It is shown early in the tight and atrophied scalp, with its accompanying baldness. When these changes, the immobile shrunken scalp and baldness, come on in youth or middle age, I believe they can in most cases be traced to surface atrophy following a temporary or permanent weakness in the central circulation.

The practical deduction is without loss of time to restore the surface circulation and to attend carefully to the state of the heart and general circulation. By means of heart tonics, rest, diet, baths, carefully graduated exercise, a great deal may be done to restore the heart to the adequate performance of its functions. Locally, the use of stimulant lotions and ointments, massage, shampooing, Turkish baths and electrical stimulation are all reasonable and useful measures. Nor must we forget the need of antiseptics to hold local infection in check.

If the explanation of the inadequacy of the heart circulation as the cause of many cases of acute shedding of hair be correct, one would expect to find examples in patients suffering from serious organic disease of the heart. I have noted a connection of the kind in quite a number of cases. Details of three of them are here given:—

Case 1.—C. T., f., æt. 30; school teacher. Hair began falling two years ago; turned grey and broke off short. Five years ago had an attack of gastritis, with severe dyspepsia. Two years ago influenza. Now good health, except constipation and dyspepsia. Mother had rheumatic fever. Patient has not suffered from rheumatism, but has been subject to sore throats. There is locally on scalp some redness, a few seborrhœic papules and some dandruff, but not enough to account for the loss of hair. The hair is thin, short, fluffy and lustreless. The heart shows mitral regurgitation.

Case 2.—M. B., f., æt. 21, s.; machinist. Complaining of acute loss of hair, which she described as "coming out in handsful." A fortnight ago the hair was thick, but is now extremely scanty. There is nothing in the scalp to account for the condition. She has twice been laid up with severe rheumatic attacks, one at 8 years (lasting for six months), and another at 18 years (treated in St. George's Hospital). There is aortic obstruction. Pulse 100, good strength. There is some palpitation if excited, but no complaint of shortness of breath, dyspepsia or swelling of ankles. The alopecia was regarded as a delicate clinical sign of failing cutaneous circulation, registered in the hair changes. (From Dr. Meachen's clinic at Blackfriars.)

Case 3.—T. P., f., æt. 28, s.; teacher. Complaining of loss of hair last three years; was previously thick and long, now there is a short, scanty growth. The patient is tremulous and nervous, suffers from dyspepsia and palpitation; feet swell at night. Gets right-sided and frontal headaches. Has mitral stenosis and regurgitation.

Other cases could be added in which patients who have come for advice as to loss of hair have been found to suffer from valvular disease of the heart. In my opinion, as already hinted, we shall one day probably add falling of hair to our early clinical signs of failing compensation.

OPERATING THEATRES.

KING EDWARD'S MEMORIAL HOSPITAL, EALING.

Ovarian Cyst with Twisted Pedicle.—Mr. Carless operated on a healthy woman, æt. 30, who, 36 hours before, was wakened from her sleep with acute abdominal pain, which was primarily referred to the left side. This was accompanied by sickness and prostration, which persisted to the next day, when the pain became more marked and shifted to the hypogastric region and to the right rather than to the left side. The temperature was not raised, but the pulse was over 100 and the abdomen somewhat distended; it was not, however, rigid, and there was no abnormal dulness on percussion. Examination per rectum revealed the presence of a rounded swelling in front of the viscus, and on combined vaginal and rectal examination this swelling was more clearly defined as a tense, localised mass about the size of a cocoanut and markedly tender. A diagnosis of torsion of an ovarian cyst was made and immediate operation decided on.

The patient having been anæsthetised and placed in the Trendelenburg position, the abdomen was opened in the median line. The first thing met with was an ovarian cyst the size of a large orange, presenting anteriorly and free from rotation or inflammation; this was the right ovary. On passing the hand into the pelvis, the left ovary was found, as anticipated, red and congested with a twisted pedicle in Douglas's pouch. There was a certain amount of free blood-stained fluid in the peritoneal cavity. Both ovaries were removed, the pedicles being transfixed and ligatured with stout silk. The left ovary was twisted on its pedicle three times, and the tube and ovarian tissue were engorged with extravasated blood. There had been so much effusion into the peritoneal cavity that it was thought wise to introduce a Keith's drainage tube for 24 hours; the abdomen was otherwise closed in the usual way.

Mr. Carless pointed out the interesting fact that this patient's symptoms commenced during sleep, and commented on the frequency with which grave abdominal lesions start in this way. He thought possibly the increased peristalsis resulting from a good supper might have something to do with this, and his own experience pointed to the Sunday night's supper as being frequently responsible for serious attacks of abdominal mischief. Internal strangulation, acute appendicitis, and twists or kinks of an organ are not infrequently produced in this way. In cases of torsion of the viscera, he remarked, one usually finds the viscus twisted on itself two or three times, and it is probable that the trouble had commenced before the final twist is given which determines the strangulation of the viscus. In this particular instance, cross-examination of the patient after operation elicited the fact that she had been complaining of mild abdominal pain for the day or two before the outbreak of serious symptoms. The diagnosis, he said, was made by a consideration jointly of the symptoms and physical signs. The symptoms might have pointed to an internal strangulation under or over a band. Appendicitis was thought of, but ruled out by the absence of fever and of rigidity of the abdominal wall. The localised swelling felt in the pelvis suggested the ovarian origin of the trouble; and he thought too great importance cannot be laid upon the value of a combined rectal and vaginal examination in such conditions. The cysts, when examined, proved to be of the ordinary unilocular variety, and were not dermoids. Ovarian dermoids, Mr. Carless said, are well known to be more prone to rotation than other varieties of ovarian growths.

TRANSACTIONS OF SOCIETIES.

THE NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held July 11th, 1912.

The President, Dr. P. S. Abraham, in the Chair.

Dr. Tom Robinson showed a man, æt. 33, with eczematous dermatitis, who was also the subject of syphilis. Six years ago he had primary and secondary symptoms, followed by punched-out gummata upon the forehead. He had been liable to attacks of an eczematous character every summer.

The President said he had seen a good many cases of eczema in syphilitics. The combination of syphilis and psoriasis was also not uncommonly met with, but it was, perhaps, a little more puzzling at first sight.

Dr. Norman Meachen showed (1) a case of psoriasis in the sixth generation in a girl, æt. 8. The family history was very clear, the transmission being through the paternal grandmother. It was also interesting to note that where there were several children in a generation, the first two would be free from the disease, but the third child would be affected.

(2) Lupus of the ear after piercing for ear-rings. The patient was a married woman, æt. 50. The disease affected the lobe and adjacent portion of the right ear, which had been pierced for ear-rings 25 years ago. About six months afterwards a small lump appeared which gradually involved the skin. She had had one X-ray application, and it was proposed to continue this treatment.

The President showed a boy, æt. 9, with canities and leucoderma. About three years ago he had alopecia areata, and the hair turned white upon the patches. Soon afterwards areas of leucoderma appeared upon the hands and feet. The greyness was more marked after an attack of diphtheria. Two years ago he showed signs of left external strabismus, and he began to exhibit curious mental tendencies, among them being an inclination to wander away from home.

Dr. Alfred Eddowes remarked that in the text books it was stated that leucoderma showed a tendency to be symmetrical. He would go further and say that it was practically always so, and he pointed out the symmetry in the present case.

Dr. David Walsh showed a series of coloured drawings to illustrate the connection between

CHRONIC AND RECURRENT SKIN AFFECTIONS AND CARDIAC DISEASE.

Several of these drawings were of chronic or recurrent cases of dermatitis of the limbs of an eczematous or psoriatic type, in which he had found unmistakable evidence of cardiac weakness or actual valvular defects. He maintained that the condition was one of lessened resistance to traumatism due to an enfeebled circulation. In certain cases the eruption would only appear upon failure of compensation, and he considered that this theory might be the key to many an obscure problem in dermatology. Circulatory inadequacy might also be responsible for the failure in certain cases of modern therapeutic methods.

Dr. Meachen said that he was quite sure that dermatologists often took too narrow a view of their cases. He had been greatly struck not long ago by the fact that several of his cases of an intractable and chronic character were discovered by Dr. Walsh, who kindly examined them one day in his clinic, to have cardiac disease. In one or two instances this fact would easily escape detection unless a systematic examination were made. He thought that a good deal more would be heard of this observation in the near future.

Dr. Walsh also showed (1) a young man, æt. 22, with alopecia of nervous origin, which had been considerably aggravated by a blow received four months ago.

(2) For Dr. T. P. Beddoes, a case of recurrent universal psoriasis in a man, æt. 32. The eruption had appeared regularly every summer since the age of ten, and the father suffered from the same disease.

Dr. D. Vinrace showed (1) a man, æt. 67, with a fungating condition upon the inner side of the right shin of long duration. A poultice had been applied a year ago to the place, which was then a large reddened patch. No glands were enlarged.

The President recommended a starch poultice to remove some of the crusts, and afterwards an application of X-rays.

Dr. Meachen thought that the condition was not infrequently seen upon old-standing eczematous patches upon the legs. The small papillary excrescences were more of the nature of hypertrophied granulation tissue, and it was not necessarily malignant.

(2) A boy with herpes facialis in the right supraorbital region, which had become infected with impetigo.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, July 20th, 1912.

At the Verein für Innere Medizin und Kinderheilkunde, Hr. Joachimsthal discussed

The Present Position of the Treatment of Congenital Dislocation of the Hip-Joint.

He said that considering the satisfactory advances made in the treatment of congenital dislocations of the hip during the last twenty years it would be of interest to take a view of the present, and a retrospective glance over it, to also cast a forward glance in respect of the points to be aimed at.

The knowledge that treatment would be the more satisfactory the earlier it could be begun led to a further reconsideration of the diagnostic signs. In this respect he laid special stress on a symptom first brought into notice by himself, by means of which he had invariably recognised the anomaly during the first six months of life. If in a case of unilateral dislocation both thighs were put into a right-angled flexion, and then both were abducted as equally as possible, a difference would be noted between the two thighs. The displacement upwards and backwards would be recognised by a corresponding change of direction of the thigh, by a distinct "saddling" of the inner surface of the upper part of it, which was made more marked by a springing forward of the adductors, and which could be recognised even when the condition was bilateral.

The treatment in case the age of the patient was suitable consisted in bloodless reposition as carried out by the speaker in nearly 1,000 cases. For the few cases in which the bloody operation was called for to-day the incision in the direction of the adductors as carried out by Ludolph was the proper one. The lower time limit of the bloodless operation was generally accepted to be towards the end of the second year. The speaker had succeeded in determining the luxation in a number of cases within the first six months of life, and in completing the treatment in a comparatively short time. Such early treatment, however, required a special form of bandage. As the higher time limit one should not go beyond the tenth year in unilateral luxations, and not beyond the seventh where the luxation was bilateral. In this way unfortunate accidents were avoided such as fractures, paralyses, etc., but also obstinate stiffenings, etc., that sometimes themselves required treatment later on.

The head of the femur after reduction was generally kept in position by a plaster of Paris bandage covering the pelvis and hips placed in position whilst the thighs were flexed at a right angle and abducted. The children went about with the sole of the foot raised for about three months only in exceptionally strong torsion to be later followed by a second plaster of Paris bandage applied from outwards to within. As the torsion in congenital dislocation of the hip increased with years it was desirable to commence the treatment as early as possible.

If an anatomical reposition had taken place any further mechanical treatment after removal of the bandages was not only superfluous, but injurious. Children regained their normal mobility by their own unaided muscular movements, passive movements might result in recurrence of the luxation. It was only in children approaching the upper age limit, or in such as had been treated very early, that stiffness of the hip affected lasted very long. In the older patients the reason for this lay in the fact that the opposed surfaces of the joint did not fit each other accurately. In the cases of children operated on early, the speaker was of opinion that the lingering stiffness was due to muscular weakness in the infants, who had not power of themselves to stretch the ligaments sufficiently.

Methodical after-examinations, especially by means of the Röntgen rays, had shown that a real return to the normal was possible, and that it actually took place even to the mutual adaptation of the head of the femur and the acetabulum. In contrast to this it had been shown also by material of the speakers, that years after successful reposition, the ends of the femur might become again deformed. Fortunately, however, this result could only be discovered by means of the X-rays; as regarded function the limbs were perfect in the majority of cases. (The speaker here showed a large number of cases, some of which had been under treatment as far back as twelve years, by which it was seen how very satisfactory the treatment of congenital dislocations of the hip had become during comparatively recent years.)

He next showed a case illustrating the healing process in

Osteogenesis Imperfecta.

The case was that of a child, aged six months, who came under observation with signs of periosteal dysplasia, with normal epiphysial development, whilst almost all the long bones showed fractures, and were very much flexed. The bones of the skull were like paper, and with the X-rays allowed the convolutions of the brain to be distinctly seen. Although such anomalies were rarely seen except in children that were not viable, in the present instance, by the administration of phosphorus, the child had been kept alive, healing of the fractures had taken place, and to some extent the flexions of the bones had become redressed.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

THE MANAGERS OF THE EDINBURGH ROYAL INFIRMARY AND THE INSURANCE ACT.

As the result of a conference with members of the honorary staff, the Managers of the Royal Infirmary have adopted an eminently satisfactory attitude in relation to the new position of affairs which has been created by the Insurance Act. It is all the more gratifying that they are making the stand indicated in the resolutions to be referred to, because the Edinburgh Infirmary, historically, and by use and wont, occupies an, in some respects, unique position. It claims, and justly so, to be a national, not a local, institution, and its motto, *patet omnibus*, has, figuratively, blocked the way to all attempts systematically to check abuse of its services by those who are not, strictly speaking, poor persons. It is probably almost the only hospital of the first rank in the kingdom which has never inquired in any way, by almoner or otherwise, into the circumstances of patients. If a man or woman is ill that fact alone secures his treatment within its walls. We are not concerned to defend or to criticise the system; all that we wish to point out is that for a hospital, which since its very foundation worked on these lines, to debar a certain class of persons from its free benefits is the clearest proof that could be afforded of the great change which the Insurance Act foreshadows in the management of voluntary charities. Arising out of the circulation of the complementary pledge various meetings of the staff were held, and it was found that many members of the staff felt themselves precluded from signing the pledge on the ground that to do so might lead them to violate the terms of their service in the Infirmary. Accordingly a deputation met the managers and laid before them a statement of the position in which the medical profession found themselves. After deliberation the managers issued early this week the following sympathetic, and, as we have said, entirely reassuring reply:—"I am directed to say that the Board sympathises with the staff in the difficult position in which they are placed at the present time, but is confident that the staff, while maintaining the fullest loyalty to their professional brethren, will always keep in view the true interests of the sick poor for whom this great charity exists and is supported. I am further directed to say that the Board, after discussion, arrived at the following conclusions:—(1) That in present circumstances insured persons being entitled to medical benefits under the Insurance Act should not be treated in the out-patient department of the hospital except in accident cases, urgent cases, and suitable consultation cases. (2) That the honorary staff shall be entitled to exercise the option (recognised in private practice) to decline to meet any practitioner in consultation should such a course be considered advisable, but always provided that no patient shall be denied immediate advice or treatment if that be requisite on medical grounds. (3) That the question of investigating the circumstances of applicants for the benefits of the hospital by means of almoners or otherwise is one which will require time and care in consideration owing to its undoubted complexity. The managers will, however, give the matter their most careful consideration in due course." The practitioners in the city have received the managers' pronouncement with relief. Determined as they are not to enter into contract practice under the Act, they felt that in a city so full of medical charities as Edinburgh, almost every one of which follows the infirmary's lead of treating all and sundry, their efforts would be rendered nugatory if insured persons could get free medical treatment for the asking. Now this is not to be. The other charitable institutions have not yet decided on their course of action, but there is no real doubt that they will follow the Infirmary, and, even if they did not, there is none which could in any serious way tackle the problem.

National Insurance Act Sanatorium Benefits.—There is not much to chronicle as regards the general trend of events in connection with the Insurance Act, further than to say that the general feeling throughout Scotland is in favour of breaking off what are euphemistically described as "negotiations." Where, as in the present case, we have an organised profession stating their minimum demands, and one of His Majesty's ministers asserting that under no circumstances can these be granted, it is permissible to doubt whether "negotiation," in the ordinary usage of the term, is possible. Dr. McVail, Deputy-Chairman of the Scottish Insurance Commission, addressed the first meeting of the Insurance Committee for the County of Linlithgow, on July 19th, and some of his remarks on the question of sanatorium benefit are not without interest. He explained to the audience the meaning of "sanatorium benefit," and then went on to urge that Insurance Committees should take advice on the subject from medical Officers of Health, and, guided by them, made arrangements for the proper treatment of patients. He then went on to refer to the report of the Departmental Committee, the root idea of whose scheme is a tuberculosis officer, and expressed the hope that the medical profession would bear a share in the work, and would be linked up on suitable terms with the Tuberculosis Officer. The interesting point is that Dr. McVail seems inclined to place the ultimate control of tuberculosis under the Medical Officer of Health rather than under a tuberculosis expert. For ourselves, we should frankly regret this. It is true that tuberculosis is a social as well as a purely clinical problem, but we strongly feel on the side of those who think that the sanatorium benefit, which relates to the actual treatment of tuberculous persons, should be in the hands of, and under the control of clinicians—experts in tuberculosis. The Medical Officers of Health have their hands quite full enough if they deal effectively with, say, the housing problem in connection with tuberculosis, and they really have not the requisite clinical experience to settle how best, in an individual case, sanatorium benefit should be applied. It seems to us that the system that has so long worked successfully in Edinburgh—viz., a separate tuberculosis dispensary and its ramifications, under a clinical expert, is a far more efficient organisation than could have been created by a public health official pure and simple. It is one of the most serious consequences of the ill-considered haste with which the medical benefits of the Act have been conceived that the sanatorium benefits, which in themselves are quite unobjectionable, and ought to prove highly beneficial to the community, stand in danger of suffering through the inability of the medical profession to work them, and may ultimately be thrown into the hands of the public health authorities instead of into the hands of those whose life-long training eminently suits them for such work. Several letters have appeared in the *Scotsman* criticising Sir William Plender's statistics, and one point raised by Dr. A. J. Campbell, Duns, deserves passing mention. He shows that the ratio of doctors to population for the two years is 1 : 2,420 and 1 : 2,838 respectively; that the average of daily visits is 9.33 and 9.01, and points out that in a community of about 2,400 people more than nine patients in a day require visits. In another letter on the subject Dr. Wm. Elder shows that the fees work out at something like 4s. a visit. Clearly, something wrong somewhere.

BELFAST.

The Insurance Act.—A general meeting of the medical profession in the city was held on Wednesday evening, July 17th, to consider the Act, and was largely attended. The chair was taken by Sir John Byers, who mentioned the various points to come before the meeting for consideration, and emphasised the need of unanimity. A draft letter dealing with the question of contract practice was submitted by the local medical committee, and after some discussion was unanimously adopted and ordered to be printed and circulated among those interested. Briefly, it lays down the three points approved by the Dublin meeting, and declares that the Belfast practitioners have resolved to adhere to these. The names of those who have signed the declaration will be appended, and it is satisfactory to know that there will be very few of the local practitioners missing. Notice is to be given to the Friendly Societies that the existing contracts will expire at the end of the year, and will only be renewed on the approved terms. A doubt seemed to exist in the minds of some members as to how far these terms are applicable to juvenile societies. It is clear that 8s. 6d. per head is an impossible figure where a number of children in a family belong to a society, and some definite arrangement for families will have to be made. At a meeting of the County Londonderry practitioners held last week, a unanimous agreement was come to as to terms for certificates under the Act, and the pledge issued by the Dublin meeting was cordially approved. If any practitioner in the county is approached by any approved society with the object of securing his servies, he should communicate with Dr. Morrison, Blackhill, Coleraine, Co. Derry.

Royal Victoria Hospital and the Insurance Act.—At the fortnightly meeting of the Board of Management of the Royal Victoria Hospital, Belfast, held last week, the collectors reported that as the result of the Insurance Act some subscribers and firms were withdrawing their subscriptions. The Board decided to send a letter to these subscribers, pointing out that the working of the Insurance Act did not in any way affect the working of the institution or the necessity for funds for carrying on the work, and that, irrespective of the new measure, the demand for beds and calls made upon the hospital would probably increase in the future, or at any rate be on an average with the past.

Queen's University of Belfast.—The annual graduation ceremony of this University was held on July 18th, under the presidency of the Chancellor, the Earl of Shaftesbury, K.C.V.O. The large attendance included many of the members of the Corporation (who wore their robes of office) and representatives of various public bodies. In a brief speech the Chancellor referred to some benefactions recently received, one being the notable gift of £25,000 from the Misses Riddel for the provision of a hall of residence for women students, and another the legacy of £3,000, under the will of the late Mrs. Magrath, widow of Dr. J. Magrath, to found a Magrath clinical scholarship to be given for proficiency in reports of bedside cases, open to fourth year medical students. In the M.D. degree examination, two gold medals were awarded for theses sent in by Dr. Victor Fielden and Dr. Heard. Referring to the former, the Chancellor said that the Professor of Bio-chemistry in the University of Liverpool had expressed the opinion that the thesis would be awarded the highest distinction in any university in this country with whose examinations he was acquainted.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

AUSTRALIA FOR TUBERCULOUS CASES.

To the Editor of The Medical Press and Circular.

Sir,—During the last few years, I have seen a large number of cases both of early and late phthisis, among immigrants who have come from Great Britain to Australia. These persons allege that they have been advised by doctors to proceed here, as the climate would effect a cure in their cases. Most of these immigrants are lads and young men, and their lot on arrival here is a very unhappy one. They are totally unfit for the hard work of a farm, and they either have to be sent to a consumptive sanatorium or shipped back to England. If what they state about medical advice be true, it is surely very cruel for any medical man to take upon himself the responsibility of sending a patient 12,000 miles from home, where he arrives very often almost penniless, and where he receives a very scant welcome. If these cases are curable, they can be dealt with much more satisfactorily at home, and if not, it is surely better for them to die surrounded by the care and affection of relatives than amongst indifferent strangers, who resent having this burden cast upon them. I trust that this warning may do something to prevent such cases being sent to Australia.

I am, Sir, yours truly,
Richard Arthur, M.D.Edin.,
President, Immigration League of Australia.

Sydney.
June 12th, 1912.

THE COST OF THE WASSERMANN TEST.

To the Editor of The Medical Press and Circular.

Sir,—We read with very great interest your editorial comment on the cost of the Wassermann test in the current issue of the Medical Press and Circular. We fully agree with you than many medical men connected with the smaller institutions, and also many general practitioners, find the present price demanded for the Wassermann test prohibitive. In order to meet the wishes of the medical profession generally, the Wassermann Institute has been opened with the express purpose of conducting these tests at the reasonable figure of 15s. In the case of public institutions we allow an appreciable discount. So far as the tests themselves are concerned, these are conducted in strict accordance with the original *technique* and with reagents prepared under the constant control of Professor Wassermann. The Institute is also under the supervision of a medical specialist in venereal diseases. We have long felt that such an Institute was necessary, and we sincerely hope that we may receive the support of the medical profession.

We enclose herewith an announcement card we have this week issued to the medical profession,

We are, Sir, yours truly,
The Wassermann Institute.

Sutherland House,
Lloyd's Avenue,
London, E.C.
July 18th, 1912.

"UNDER WHICH KING, BEZONIAN? SPEAK OR DIE!"

To the Editor of The Medical Press and Circular.

Sir,—Science nowadays advances by leaps and bounds, and it is therefore not perhaps astonishing that a correspondent who signs himself "A Very Simple Practitioner" should show himself hopelessly behind the times, albeit only a few weeks may have elapsed since the epoch-making discovery of the "Great Physical Culturist," about which he writes, has been superseded as the result of more astonishing basic explorations. Your correspondent has evidently never heard of Oxypathy and of the great institution at which this method of curing disease is carried on. This is the message to the suffering world that the Institute of Oxypathy trumpets forth:—

"What would you not give to be for once in your life of faithful labours, REALLY WELL AND STRONG—to feel the rich red blood, the very sap of life, running riot in your veins? But—you say: Are all these things possible? Yes; Oxypathy will certainly restore you to health and keep you fit. DRUGS MAY ALLEVIATE BUT CANNOT CURE—NATURE DOES THE CURING—REMEMBER THIS. Your disease is either due to germs or the accumulation of poisonous gases or other matters within the system, or—it may be due to impoverished blood. To retain perfect health you must destroy the germs and eliminate the refuse, or both—you have to make RICH, RED BLOOD. Only one thing has ever been found which is capable of doing this universally and WITHOUT THE LEAST INJURY. This substance is Oxygen." Oxypathy, as might be expected, is of supreme value in "rheumatism, neuralgia, lumbago, sciatica, gout, dyspepsia, asthma, catarrh in all its various forms, constipation, piles, general debility, neurasthenia, liver troubles, kidney disease and bladder affections, varicose veins, and gall-stones." As to dyspepsia, upon which Dr. Willcox again discourses in your issue this week, in what is called the light of science, but in what is really the darkness of almost mediæval superstition! On the other hand, "Oxypathy cures completely and permanently any case of dyspepsia, no matter how long the trouble has existed or how complicated it may be. Nervous indigestion, flatulency and loss of appetite are readily overcome. Dyspepsia is generally accompanied by constipation. Oxypathy will cure chronic constipation. Nearly all persons afflicted with diseases of the digestive organs observe decided improvement after being under treatment only a few days."

If Dr. Willcox is wise he will now give up his hopelessly benighted pronouncements and simplify matters by urging the profession to send their patients to the Institute of Oxypathy. The method employed there evidently represents the last phase in the fairy tale of medical science; it not only supersedes the cumbrous system of what is called orthodox medicine, but even puts in the background the wonderful methods of the "Great Physical Culturist," which up to now so securely held the field.

I am, Sir, yours truly,
An Astute Practitioner.

Brighton.
July 19th, 1912.

SPECIAL REPORTS.

THE EIGHTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT LIVERPOOL, 1912.

(From Our Special Representative.)

It is twenty-nine years since the annual meeting of the British Medical Association was held in Liverpool, and now, upon the occasion of the fourth visit, it is evident that the present meeting will prove to be one of the most successful and largely attended that have ever been held. That it is one of the most momentous gatherings in the whole history of the Association goes without saying, for not only the rights of the medical profession, but also the fate of an Act of Parliament, so to speak, are at stake. Enthusiasm as to the ultimate victory for the profession runs high, and there is little doubt that the resolutions arrived at by the meeting of representatives to break off all negotiations with the Government will be confirmed at the general meeting held to-day (Tuesday). The city is very full, and not a few visitors have found some difficulty in obtaining suitable accommodation.

Sir James Barr, M.D., LL.D., F.R.S.E., the new President, is well known to the profession as a distinguished physician and scientist, in whom the dignity and influence of the Presidentship at this critical time will be well and worthily sustained.

Sir James, who is the eldest son of Samuel Barr, J.P., of Claremont, Tyrone, was educated at Londonderry and Glasgow University, qualifying as M.B. Glas. and L.R.C.S. and L.M.Edin. in 1873, becoming M.D.Glas. in 1882. He was elected F.R.C.P.Lond. in 1902. He received the honour ot knighthood in 1905.

In 1906 the University of Toronto honoured him by conferring upon him the degree of LL.D. *honoris causa*, and in 1907 he was chosen the Bradshaw Lecturer at the Royal College of Physicians of London, taking for his subject "The Pleuræ; Pleural Effusion and Its Treatment."

He has always taken the keenest interest in the medical and social life of Liverpool, being Consulting Physician to the Royal Infirmary and Visiting Physician to the Haydock Lodge and Turbrook Asylums. He was formerly Physician to the Stanley and the Northern Hospitals, Liverpool.

Sir James is a Lieut.-Colonel, 1st Western General Hospital, R.A.M.C.

He is also an ex-President of the Lancashire and

Cheshire Branch of the British Medical Association, and also of the Liverpool Medical Institution.

As a writer upon medical subjects Sir James Barr is well known, especially in connection with the circulatory and renal systems.

Religious Services.

A Roman Catholic Service will be held at 9 a.m. on Wednesday at the Pro-Cathedral, Copperas Hill, when the celebrant will be Archbishop Whiteside. The Rev. Herbert Lucas, S.J., M.A., will deliver an address.

The Anglican Service will be held at St. Luke's Church, at 2.30 p.m. on Wednesday, when the Bishop of Liverpool (Dr. Chavasse) will preach the sermon.

General Arrangements.

The annual general meeting of the Association was held yesterday afternoon (Tuesday), when the new President was officially inducted. At 8 p.m. Sir James Barr delivered his Presidential address in the Royal Court Theatre, which had been especially reserved for the occasion.

The annual breakfast, organised by the National Temperance League, takes place to-morrow (Thursday), at the Walker Art Gallery, at 8 a.m., when Professor F. W. Mott, M.D., F.R.S., will give an address.

The Work of the Sections.

The scientific work of the sections, of which there are twenty, commences at ten o'clock this morning. A full and varied programme has been provided for in this direction. In the Section of Medical Sociology, the subject of the formation of a "Public Medical Service under Professional Control" will be sure to draw large audiences. All the sections are commodiously housed in the fine buildings of the University.

The Social Functions.

To-night a soirée takes place in the Walker Art Gallery. The Local Entertainments Committee has made the most ample provision for the enjoyment of those attending the meeting. To-morrow afternoon a garden party will be given by Dr. C. T. Street at Haydock Lodge Private Asylum, and by Mr. and Mrs. Frank Paul at "The Anchorage," Hoylake, Later on the Lord and Lady Mayoress (Lord and Lady Derby) will give a garden party in the Botanic Gardens.

In the evening the annual dinner of the Association takes place, after which there is to be a performance for ladies of "Mrs. Gorringe's Necklace" at the Royal Court Theatre. On Friday, the President and Lady Barr give a garden party at Calderstones Park, and Lord Derby, the Chancellor of the University of Liverpool, will entertain a number of visitors to luncheon at the Town Hall, prior to the conferring of honorary degrees at 2.30 p.m. in the Philharmonic Hall. Sir William Lever will also entertain a party of guests to luncheon at Hulme Hall, Port Sunlight, and he will also entertain a large party to tea in the afternoon and show them over Port Sunlight. Numerous excursions have also been arranged to various outlying country districts.

The Exhibition.

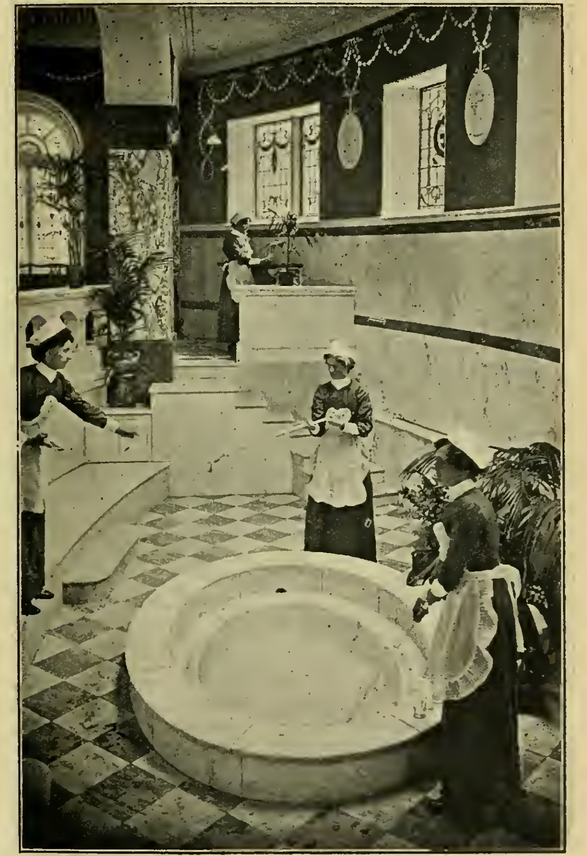
This indispensable feature of the annual meeting, which every member should make a point of visiting at least once, is housed in the Old Gill Street Market, where all the very latest in surgical instruments, drugs, appliances, foods, and medical books are on view daily until Friday (inclusive), from 9 a.m. to 6 p.m.

BUXTON—RE-OPENING OF ST. ANN'S WELL.

In the early days of the present month Buxton was astir with a memorable function—namely, the reconstruction and re-opening of "St. Ann's Well" by His Grace the Duke of Devonshire. Owing to the exceptional interest taken in recent discoveries of the radio-activity of certain waters, excavations were made in the Crescent roadway near the present Thermal Establishment of Buxton, resulting in the discovery of a new source of supply at a temperature of 82° F., of greater radio-activity than the existing sources, and considerably nearer the Pump Room. The new source was found on December 4th of last year, and at a meeting held on the 8th of that month Mr. Langley, the Town Architect and Surveyor, was instructed to proceed to protect such new supply by the construction of a white glazed chamber built on the rock over the site of the spring. The Well Chamber is 29 ft. long by 14 ft. wide, and elliptical in plan, the floor level being 4 ft. below the general floor of the room.

In the centre of the Well Chamber the chief object —*i.e.*, the well, is placed. It is elliptical in form, the outer shell being formed in cement concrete, lined with blue bricks, and finished inside and out in white statuary marble. Through the perforations in the floor of this basin the waters rise with all their natural properties, overflow the channel, and pass away through a 3 in. waste pipe outlet.

The floors of the Well Chamber and staff room and Chalybeate Room are paved with alternate squares of Swedish green and white Carrara marble; the serving landing steps, etc., and wall linings to same are also in white Carrara marble. The back wall of the Well Chamber is faced with fine statuary marble, with two bands of delicate Swedish green marble introduced; altogether a very attractive and artistic effect is produced, surpassing anything we have seen at the thermal establishments on the Continent.



The Famous Well.

The newly constructed St. Ann's Well, in which the healing water is now dispensed, was the centre of attraction for visitors and townspeople, in addition to those to whom special invitations had been extended. Therein was situate the keynote of Buxton's success, the passport, as it were, to her future increased popularity and prosperity—a never-failing supply of natural thermal mineral water, having distinct radio-active properties, from whose virtues even greater good is hoped for in the treatment of disease than has been the case in the past.

After an inspection of the new Well and the Thermal

Establishment generally by the numerous visitors specially invited, among whom were a large sprinkling of medical authorities from London, the provinces, Ireland and Scotland, an elaborate luncheon was partaken of, at which one toast only was proposed—that of H.M. the King. A procession was then formed and met by the Duke of Devonshire, who remarked on the close connection which had existed for so many generations between members of his family and the town of Buxton, and said how glad he was to have the opportunity of not only renewing but of cementing the ties of affection and regard. It is well known to history that goes back to the time of the Romans that the waters of Buxton have been well and rightly renowned. His only hope was that the fame and name of the town would so continue to increase that even further extensions would be required to meet the growing demands. It is interesting to note here that His Grace is at present undergoing a three-weeks "cure" at Buxton.

Mr. Langley then presented the Duke with a gold key; the door was unlocked, and the holders of tickets flocked into the room. Expressions of surprise and delight came from everybody's lips.

The ceremony of blessing the well was impressively performed by the Vicar of Buxton, the Rev. Canon Scott-Moncrieff, D.D.

Dr. Makower, D.S.C., was then introduced by Mr. W. F. Mill, Chairman of the Urban District Council, and spoke on the radio-activity of the waters, which, he said, must have to some extent been a matter of speculation for some time. Chemical analysis revealed nothing either in the water or gas which would completely explain the marvellous curative properties which the waters were known to possess. Recent experiments had, however, revealed the fact that the waters were of radio-active action, that they contained minute traces of extraordinarily active materials sufficient to produce effects of considerable magnitude. There were minute traces that it would be impossible to detect by ordinary chemical methods, but the waters themselves were known to contain radium emanation, a remarkable gas that was constantly being given off from radium. No doubt that far down below the surface of the ground the water passed over radium deposits and there acquired its activity, an activity which was brought out to the surface of the earth with the gas in solution in the water of the spring. Although the activity had been tested, it must be understood that the quantity of material was very minute, but the quantity compared very favourably with the radio-activity in any source in this country that had been tested. So they had there a comparatively powerful source of supply which might account—though he did not say it was the only factor in the consideration—for the remarkable curative properties of the water.

Speeches followed by Dr. William Ewart, of London, Sir James Barr, of Liverpool, Professor McArdle, of Dublin, and by Dr. A. Shipton on behalf of the local members of the profession.

The formal proceedings then terminated, and from the well the guests proceeded to the baths, then to the Devonshire Hospital, and later to the Pavilion, where tea was provided by the invitation of the Chairman and Directors of the Buxton Gardens Company.

Mr. F. J. C. Broome, the Manager of the Baths and St. Ann's Well, will, we understand, be pleased to show anyone over the whole establishment, and, in addition, to grant free facilities to members of the medical profession to take any of the treatments (over 80 in number).

OBITUARY.

SURGEON-GENERAL S. BLACK ROE.

THE death is announced from Ballyconnell, co. Cavan, of Surgeon-General Samuel Black Roe, C.B., in his 82nd year, who had a distinguished military career. Becoming attached to the 92nd Gordon Highlanders in 1855 as Assistant Surgeon, he served with them until 1882, taking part in the Crimean campaign, and later in the Indian Mutiny, where he was under fire on many occasions. He was also present with the Highlanders in the second Afghan campaign, 1879-1880, and in the Boer war of 1881. After his retirement from the Gordons he was Principal Medical Officer at Madras, a post he held until 1890, when he retired with the rank of Surgeon-General.

DR. W. A. LLOYD-DAVIES, OF WOLVERHAMPTON.

WE regret to announce the death of Dr. William Allan Lloyd-Davies, which took place last week at his residence, "Mountfield," Wolverhampton, aged 47. The deceased, who studied at Owens College, Manchester, and Anderson's College, Glasgow, qualified as L.R.C.P. and S.Edin., L.F.P.S.Glasg., and L.M. in 1892. He held numerous local appointments, and was widely known and respected in the district. He had been suffering for some time past with a weak heart, and a fatal seizure occurred in his consulting-room, all efforts to revive him proving futile.

REVIEWS OF BOOKS.

DICTIONARY OF MEDICAL DIAGNOSIS. (*a*)

A MEDICAL text-book that has reached a second edition has usually justified its existence and proved its utility, and we congratulate Dr. McKisack on this evidence of the success of his undertaking. This very success, too, absolves us from the necessity of any minute criticism of the work, for since practitioners have been glad to buy the book we may conclude that they have found it valuable. The publication of a second edition has enabled the author to improve the work in many ways, both by the modification of descriptions formerly given and by the addition of new ones. In a work of the kind finality is impossible, for each addition to our knowledge modifies in some respect the value which we attach to the various signs and symptoms presented by our patients. In the methods, too, by which these signs and symptoms are investigated there is a constant change, the older and more complicated giving place to the newer and more simple, and fallacies formerly unsuspected are detected and exposed.

In this edition Dr. McKisack has brought his work well up to the standard of our present knowledge, and placed at the disposal of the practitioner a ready means whereby he may gain information as to the interpretation of the symptoms that he meets in practice, and of the methods he may make use of in the investigation of those signs on the recognition of which accurate diagnosis and successful treatment ultimately rest.

DISEASES OF INFANTS AND CHILDREN. (*b*)

The second edition of this valuable compendium of Children's Diseases worthily upholds the traditions of its predecessor. All the new and practical advances that have been found to be of service in the field of children's affections have been found a place, and that of vaccines for special diseases has especially been made as practical as our knowledge at present admits, along with those of other recent advances in pædiatrics. The positions held by the authors have enabled them to make full use of their experiences and observations. Each chapter deals with the separate complaints which are likely to be encountered during its existence, and no disorder of any importance has been left untouched. To the practitioner the main value of this book lies in the fact that the authors have discussed at some length the symptoms and causes of disease which fre-

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(*a*) "A Dictionary of Medical Diagnosis. A Treatise on the Signs and Symptoms observed in Diseased Conditions, for the use of Medical Practitioners and Students." By Henry Lawrence McKisack, M.D. Second Edition. 8vo., pp. xi. and 590. London: Bailliere, Tindall and Cox. 1912. Price 10s. 6d. net.

(*b*) "Diseases of Infants and Children." By H. D. Chapin, M.D., Professor of Diseases of Children, Post-Graduate Medical School and Hospital, and G. R. Pisek, M.D., Adjunct Professor. Second Edition. Pp. 654, with 11 coloured plates and 18 other illustrations. London: Bailliere, Tindall and Cox. 1912. Price 18s. net.

quently are classified as being outside the line of medical disorders. The authors are to be congratulated on their description of *treatment*, which is what the average practitioner reads first, as not being limited in the usual meagre manner; but throughout the book valuable and at the same time practical information is found on nearly every page, more especially that on infant feeding, which enhances the usefulness of the book very considerably. This work on Diseases of Children should be on the bookshelf of every scientific medical practitioner.

ANÆSTHETICS IN DENTAL SURGERY. (*a*)

In the elaboration of the means for producing anæsthesia for surgical operations the dental profession has taken a prominent part. Not only were members of that profession leaders in the investigations which made surgical anæsthesia possible, but ever since they have been pioneers in the teaching and perfection of the anæsthetist's art. Both Wells and Morton, to whom, above all others, we owe modern anæsthesia, were practising dentists, and medical men have merely followed the dentists in insisting on a knowledge of the subject as an essential part of the equipment of the members of their profession. Beside this, much of the progress that has been made in the study of the subject has resulted from the co-operation of the doctor and dentist in their endeavours to produce a satisfactory anæsthesia for dental operations.

The book before us is another example of this co-operation, and affords another proof of its value. The authors have clearly and shortly described the various methods they have used and have proved to be satisfactory and useful. A book of the kind depends for its value on the ability of the teachers who have written it, for it is essentially personal in its teaching, but when the writers are teachers of high ability, the value of the book to the student is much greater than any merely impersonal and formal exposition. In the present instance, whether we judge the teachers by their book, or the book by the teachers, the result is extremely satisfactory. The methods recommended are good and the description of them clear and concise. There will, of course, always be differences of opinion between anæsthetists as to which method is the best, but that does not prevent agreement between them as to what is good, and we feel confident that there will be a general agreement in the verdict on those recommended by the authors in this text-book.

In the interesting epitome of the history of surgical anæsthesia, which forms the introduction to the book, we regret to note the omission of any reference to the work of Crawford Long. We are under no obsession as to the position Long occupies in the history of anæsthesia. The world does not owe the great discovery to him, and as far as we can see his work made no difference either to the discovery or the development of anæsthesia, but still there can be no doubt that Long was the first who intentionally induced surgical anæsthesia for surgical purposes by modern methods. Surely he is entitled to be mentioned as much as Wells in any history of the subject. Davy's investigations of the properties of nitrous oxide gas were made in 1800 and not in 1780, as stated in the text.

A NURSE'S LIFE IN WAR AND PEACE. (*b*)

The varied experiences of Miss Laurence's life as a nurse in times of war and peace cannot fail to be interesting to all medical readers. Written very naturally and simply, with no straining after effect, the book narrates what may be called just everyday happenings, only that the commonplace is relieved from dulness by being illuminated with the bright tints of enthusiasm and restrained imagination.

Those who were contemporaries with Miss Laurence in the "General Hospital, London," will appreciate the backward glances into "C. Ward" in the early nineties, when the work was so much harder, and the conditions of nursing so widely different from those of the present day. It is not, perhaps, a wildly exciting book, and the narrative is rather disconnected, being written in the form of letters extending over a period of fourteen years; but its charm is found, as Sir Frederick Treves says so aptly in his admirable preface, in its "simplicity, artlessness, and obvious candour."

Miss Laurence has many a tale to tell of the South African War, and her life as an Army sister, which resulted in the fulfilment of her girlish desire to win the Royal Red Cross. Her experiences were full of kaleidoscopic change and unexpected difficulties. Her health, too, gave her trouble at times, but throughout she met all uncomplainingly, and took everything as part of the day's work—a lesson, by the way, worth learning by nurses of the rank and file as well as by the leaders of the profession.

A SYSTEM OF SURGERY. (*a*)

"A System of Surgery," edited by C. C. Choyce, is composed of three volumes; the first volume, the one now issued, lies before us, and is chiefly devoted to an extensive consideration of Surgical Pathology and General Surgery. In the preparation of this work Dr. Choyce has had the advantage of the co-operation of Professor Beattie, of Sheffield, who is the Pathological Editor, and who has written the sections dealing with the pathological contributions. The greater part of the volume is occupied by an exhaustive study of the pathology of disease, which is treated in its entirety, and no fact of any importance is omitted. There is an extremely good article on spinal analgesia by Dr. Lawrie McGavin, wherein the advantages, indications, and contra-indications, anatomical points, and the phenomena during the effects of analgesia are very ably discussed. Dr. Ironside Bruce contributes an excellent article on X-ray Examination, and the student of tropical medicine will find a clear and lucid contribution from the pen of Dr. C. W. Daniels, of the London Tropical School of Medicine. The book is profusely and clearly illustrated, and the classification adopted throughout reveals the work of an accustomed teacher, and the work of one who is well skilled in the details of a clinical pathological laboratory, and the bacteriological section is equally good. Without exception, all the articles contained in this volume are worthy of most careful study, and the book is singularly free from errors.

CLINICAL DISORDERS OF THE HEART-BEAT. (*b*)

Although labelled "A Handbook for Practitioners and Students," we doubt whether many of the former will summon up the courage to study the intimate mechanism of heart-block or learn to distinguish between auricular fibrillation and paroxysmal tachycardia. What will interest the general (medical) reader in this monograph are the author's interpretations of sphygmographic readings. In spite of the boldness of these tracings, one is often at a loss to make out their real bearings, and the strokes do not possess the same significance for all observers, be they never so expert. Now the author's conclusions are based on concomitant tracings of the apex beat, so that he is enabled to establish a relationship between the two sets of phenomena and furnish a reason for the faith that is in him.

The author compels our admiration for the elaborate and careful work, thanks to which the physiology—and incidentally the pathology—of the heart-beat has been elucidated and light shed on its most recondite mechanism.

Cardiac pathology possesses great attraction for certain practitioners, and to these Dr. Lewis's book

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(*a*) "Anæsthetics in Dental Surgery." By Frank Coleman, M.R.C.S., L.D.S., and Harvey Hilliard, M.R.C.S. With six plates and thirty-eight illustrations in the text. 8vo., pp. x. and 300. London: H. K. Lewis. 1912.

(*b*) "A Nurse's Life in War and Peace." By E. C. Laurence, R.R.C. With a Preface by Sir Frederick Treves, Bart., G.C.V.O., C.B., LL.D. London: Smith, Elder and Co. 1912. Price 5s. net.

(*a*) "A System of Surgery." Edited by O. C. Choyce, M.D., F.R.C.S., Assistant Surgeon Seamen's Hospital, Greenwich, and J. Martin Beattie, M.A., M.D., Professor of Pathology, University of Sheffield. Three volumes. Vol. I. 1912.

(*b*) "Clinical Disorders of the Heart Beat." By Thomas Lewis, M.D., D.Sc., M.R.C.P., Lecturer in Cardiac Pathology, University College Medical School. London: Shaw and Sons. 1912.

will be welcome in that it explains much that was previously obscure.

EUGENICS. (*a*)

THE story is told that a gentleman of literary tastes once told his friend that he had been to hear an interesting lecture on Keats. The friend replied, "Ah, indeed. By the way, what *are* keats?" The mental attitude is not unlike that of the ordinary educated man of to-day in regard to eugenics. The word, indeed, is current, but few people take the trouble to understand what it means. For such readers Mr. and Mrs. Whetham have supplied an excellent compendium of information. Sir Francis Galton defined eugenics as "the study of agencies under social control that may improve or impair the racial qualities of future generations either physically or mentally." Assuredly, then, it is not from any lack of importance in its subject-matter that the study has not hitherto received the attention it merits. Nowadays, however, there are signs that this neglect is disappearing. A number of earnest students are devoting themselves whole-heartedly to advancement of knowledge in this direction. Moreover, as we learn from this volume, a Eugenics Education Society has been established, and branches have been formed in various centres. Just here, we think, a certain danger lies. It is quite right that the general public should be led to regard the study of the health of the future race as of primary importance. But the positive knowledge gained is still exiguous, and the danger of inducing amateurs and intellectual dilettanti to affect an interest in any serious branch of study is that they are liable to jump to conclusions without making sure of their premisses. The sympathy of those competent to judge of scientific results is thereby estranged. Indeed, not a few of those who claim to be exponents of the science are in too great a hurry. Even the present volume shows some—not many, we admit—signs of insufficient acquaintance with the fallacies of the methods employed. For instance, discussing (p. 32) the relation between the birth-rate and the death-rate, the authors remark, "A decrease in the death-rate means that more people are living to a greater age, and probably exceeding the limit of years to be assigned to remunerative employment." This is a hasty conclusion, unless one has first made sure that the decreased death-rate is not the result of a decreased birth-rate. An increased birth-rate causes, other things being equal, an increased number of deaths, since the death-rate is highest among children.

Speaking generally, however, Mr. and Mrs. Whetham's book is a sane and well-considered invitation to the study of a very important branch of research. It is, moreover, easy to read, and we can commend it to all who wish to know something of the objects, scope, and methods of eugenics.

HANDBOOK OF MEDICINE. (*b*)

THIS volume, always a popular one with students, has undergone a process of rejuvenescence which renders it doubly worthy of their esteem. One looks askance at a volume of such modest dimensions (500 pages) professing to cover the whole field of medicine. We have turned over the pages expecting, almost hoping, to discover grave omissions, hopelessly inadequate descriptions, and general "skimpiness." On the contrary, the further one proceeds the more is the reader impressed by the extraordinarily successful way in which even such diffuse, difficult subjects as "fever," "immunity," etc., are clearly set forth in a minimum of space, for, when associated with clearness, brevity greatly facilitates a grasp of the subject.

The work has been brought thoroughly up to date. We have data on the therapeutical value of salvarsan, on the scientific use of tuberculin for diagnostic and therapeutical purposes—in fact, all the latest innovations in this department. One little criticism *en passant*. Why does the author discard the use of the customary "sputum" or "expectoration" in favour of the ugly little word "spit." The dictionary defines this word to mean saliva, and this is not what the author intends. Or is the author writing for people who are supposed to be ignorant of the usual technical expressions?

The book is well printed and well presented, and will doubtless be appreciated by those for whom it is primarily intended.

HOW TO BECOME A NURSE. (*a*)

THAT hardy little annual, Sir Henry Burdett's useful and well-known book, "How to Become a Nurse," blossoms out once more in a new edition, having already appeared in eight previous ones. Besides having undergone careful revision, the new volume contains all the latest regulations and facilities everywhere offered for training, and mentions any additional or special branches lately organised at many institutions, such as massage, midwifery, X-rays, etc.

Widely known as this book already is, we could wish for it a yet larger circulation, so that intending candidates for nursing training might make fewer initial errors in entering the profession. It is not intended for the trained nurse, the preface stating that another volume is soon to be issued at the modest price of 1s., which will deal fully with the object of "How to Succeed as a Trained Nurse," the present one devoting itself entirely to particulars of training schools in the United Kingdom and abroad.

THE SEMI-CIRCULAR CANALS AND SEA-SICKNESS. (*b*)

AN interesting item of testimony to the persistent survival of the dread ship-sickness, and the recognised importance of the same, is furnished by the publication of the formidable monograph which now lies before us. The writer is evidently an enthusiast; and it is surely from such—we believe, indeed, from such only—that we can reasonably hope to obtain a reliable solution of the sphinx-like problem which has continued to exercise humanity ever since the more venturesome members of its great brotherhood began to go down to the sea in ships. And we can answer for the accuracy of his view of his subject when he suggests that we must look for the key of the mystery among "deeper underlying causes," although "digestive disturbances have always been looked upon by the laity as the primary cause of sea-sickness." In proof of this view he instances the case of the "subject" of one of his extremely careful and exhaustive studies, who sometimes "was dreadfully sea-sick when the stomach, after being irrigated, was presumably in a resting state"; although he "suffered at times from indigestion, and did not at all experience the familiar subjective phenomena of sickness." We may mention as an item of corroborative testimony that one of the most prominent and most healthy of the world's public men in the generation just past was a notedly "bad sailor," a weakness which, we believe, prevented him from ever crossing the Atlantic.

The author has certainly left no stone unturned in the performance of his chosen task of smoothing the pathway to the mystical enclosure which has so long, and so effectively, screened off the mystery of sea-sickness. Of the countless host of anatomical and physiological facts and hypotheses therewith associated, hardly one will be found missing. And his conclusion is that "the true cause," which alone can "afford a reasonable explanation of the phenomena of

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(*a*) "An Introduction to Eugenics." By W. C. D. Whetham, M.A., F.R.S., Fellow and Tutor of Trinity College, Cambridge, and Catherine D. Whetham, his wife. Pp. viii. and 66. Cambridge: Bowes and Bowes. 1912. Price 1s. net.

(*b*) "Wheeler's Handbook of Medicine." Edited by William B. Jack. B.Sc., M.D., Assistant Physician to the Western Infirmary, Glasgow. Fourth Edition. Edinburgh: E. and S. Livingstone. 1912.

(*a*) "How to become a Nurse." The Nursing Profession: How and Where to Train. Edited by Sir Henry Burdett, K.C.B., K.C.V.O. New and Revised Edition. London: The Scientific Press, Ltd. 1912. Price 2s. net.

(*b*) "On the Physiology of the Semi-circular Canals and their Relation to Sea-Sickness." By Joseph Byrne, A.M., M.D., LL.B. Pp. ix. and 569. New York: J. T. Dougherty. London: H. K. Lewis. 1912. Price 12s. 6d. net.

most, if not all, of the cases, and of the mode of their production . . . . is to be found in functional labyrinthine disturbances, due directly to the boat's motions. . . . ." The idea is, of course, not absolutely new. It was, we believe, orginally suggested by the anatomical disposition in osseous space of the curiously disposed semicircular canals themselves. These are so eminently suggestive of the Cartesian planes and co-ordinates which yield to the mathematician all the data requisite to the location of a point, and the prophetic measurement of all its relations in space! For the treatment—it is, we are disposed to think, but fair to the author to suggest to the reader that he should consult the volume for himself. But we may mention that in cases "where the psychic factor predominates . . . . hypnotism is of undoubted benefit." The assertion that "hyoscin should never be used in sea-sickness" recalls the case of an "eminent" consulting physician who began a hyoscin campaign against neuroses after reading the evidence in the Crippen case—he had not known the virtues of that alkaloid before! And we conclude our notice of this carefully prepared monograph with an offering of cordial thanks to the author for the vast amount of information here concentrated for our benefit.

SYSTEMATIC CASE-TAKING FOR MEDICAL STUDENTS. (*a*)

ON the care and thoroughness with which the student carries out his training in case-taking depends the success or otherwise of his medical career. Medicine, we have been told, is essentially a matter of observation, and case-taking is an object lesson in the art of observing.

The field of observation has been greatly extended of late, so much so that the busy practitioner must perforce relegate much research work to specialists in that department; nevertheless he must know of and about these methods, or he will not be able to avail himself of the information to be obtained thereby, and not to be cognisant of their value nowadays is to be quite "out of the running."

The author in the space at his disposal gives a good *aperçu* of the various steps in the clinical examination and briefly summarises the supplementary means of investigation. The student will find this work of great assistance in the wards, and even to the busy practitioner it constitutes a useful work of reference.

HEREDITY. (*b*)

THE subject of heredity is now very much in the public eye, and very necessarily so, having regard to the increasing acuteness of the racial and individual struggle for existence; and to the increasing scare of race suicide, the expanding gospel of eugenics, and the demand for measures preventive of the survival of the unfit. The science of the past half-century has swept away many of the old landmarks of the former pedagogic progress, real or fancied, of view-points regarding the phenomena and laws of organic life. The importance of the great question of heredity has been always recognised in the twilight stages of the collective intelligence of human communities. It has also received a peculiar significance of characteristically modern flavour since the date of the promulgation of the theory of evolution. The author opens his lecture by pointing out the very remarkably contrasted feature of the teaching of the pathology of the present day, compared with that of former years: "the gradual recession and disuse of the word 'diathesis' as the true microbic cause of disease after disease became unravelled." This leads him to the denial of any share to heredity in the causation of tuberculosis. Still, he exhibits broad views on the influence of heredity in other directions. For instance: "The liability to the production of twins can, I think, be shown to be hereditary." We think so, too. And he has no hesitation in suggesting the great desirability of intercepting the very undesirable reproduction of "tainted stocks" by judicious utilisation of the benefit of the discovery that "exposure to the X-rays destroys the reproductive function of the generative organs without injury to the individual." Weismannism and Mendelism are sufficiently discussed, and judiciously—sometimes severely—criticised. Many other viewpoints and illustrative positions are introduced to the reader, who must find the lecture highly suggestive, even if he cannot always subscribe to the author's somewhat dogmatic statements.

LITERARY NOTES.

THE fourth edition of "Anæsthetics and their Administration," by Sir Frederic W. Hewitt, M.V.O., will be published in September by Messrs. Macmillan and Co. In the preparation of the new edition of this standard work, which has been thoroughly revised and brought up to date, the author has been assisted by Dr. Henry Robinson, Anæsthetist to the Samaritan Hospital and to the Cancer Hospital.

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We welcome, though a little tardily, the appearance of *The Review of Bacteriology, Protozoology and General Parasitology,* as an independent publication. This abstract formerly appeared as a supplement to the *Medical Officer,* and had gained the confidence of all workers in the subjects with which it deals. It will in future appear five or six times a year, at an annual subscription of half-a-guinea. Single copies will not be sold. The editors are Mr. Alexander Foulerton and Dr. Charles Slater, who are assisted by a competent staff.

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THE current number of "Pearson's Magazine" deals most opportunely with the dangers to health arising from the common house fly. Nothing could be more convincing to the popular mind than the photographic illustrations depicting the transference of disease germs, carried by the fly's legs, from putrid material and refuse to the mouth of a baby. The opinions of many well-known scientists are epitomised in a few telling phrases, headed by the letters "F.M.G.," which, being interpreted, mean "flies must go!" The value of the educative articles like this in the popular magazines cannot be over-estimated as serving to spread the principles of hygiene among the masses. Copies of the descriptive leaflet with which the article closes may be obtained for public distribution at cheap rates upon application to the Editor of "Pearson's Magazine."

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THE first number of the "Zentral-Organ der Medizen," which is an international monthly bibliographical review, has made its appearance, edited by H. Albert-Hellmers, of Hamburg. The new periodical consists of only two essential parts, the first being a list of all the more important current contributions to the whole of medical literature arranged in alphabetical order as a subject-index, the second portion being merely an index of authors. It will be seen, therefore, that this review is compiled upon a much simpler plan than that of the "Index Medicus," for if the author's name be known, it is an easy matter to turn this up and to find against it a reference number which is attached to his particular paper or papers that it is desired to trace. This number is next found in the first part, where the title of the paper and full details of the journal in which it appeared are given. There are no sub-divisions into departments of medical science in the first list, a fact which, though tending to simplification, renders it essential that only the most important word in the title of a paper whereby it may readily be identified should be indexed. Thus, it is of little use to index the article, "Influence of Salts upon the Action of Rennet on Milk," under the

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(*a*) "Systematic Case Taking for Medical Students." By H. L. McKisack, M.D., M.R.C.P., Physician to the Royal Victoria Hospital, Belfast. London: Bailliere, Tindall and Cox. 1912 Price 3s. 6d. net.

(*b*) "The Bradshaw Lecture on some Points in Heredity." Delivered before the Royal College of Surgeons of England on December 6th, 1911. By R. Clement Lucas, B.S., M.B.Lond., F.R.C.S. Pp. 50. London: Adlard and Son, 1912 word "Influence," unless it were understood that the first important word of an article should always be indexed, but this is not the universal rule. Names of new books recently published also appear in the list which, if minor inconsistencies are eliminated, will prove to be a most valuable publication.

Medical News in Brief.

A Central Health Committee for London.

After consultation with the Local Government Board, a Committee representing the Central Voluntary Health Associations summoned a conference, which was held at the Mansion House last week, to consider the desirability of forming a Central Health Committee for London which would promote joint action between metropolitan municipal authorities and voluntary health agencies in the prevention of disease and in the education of all classes in matters of health and domestic hygiene. Sir Melville Beachcroft presided.

The Chairman said the difficulty lay in the plethora of bodies which were dealing with the same subject, and it was now desirable to co-ordinate all these agencies.

Dr. F. J. Allan (Mansion House Council on Health and Housing) proposed the first resolution, which declared that it was desirable that a Central Health Committee for London should be formed.

Sir John Tweedie (National League for Physical Education and Improvement) seconded, and it was eventually carried *nem. con.*

Professor Kenwood (Vice-Chairman of the National Health Society) proposed, Dr. Prudence Gaffikin (Women's Imperial Health Association) seconded, and Mr. H. P. Boulnois supported, a resolution that the following authorities and voluntary agencies be invited to appoint representatives upon the Committee, which should have power to add to its number:—Local Government Board, Board of Education, London County Council, Metropolitan Asylums Board, Association of Medical Officers of Health (Metropolitan Branch), Jewish Board of Guardians, London Biblewomen and Nurses' Mission or Ranyard Nurses, Mansion House Council on Health and Housing, National League for Physical Education and Improvement, National Health Society, National Bureau for Promoting General Welfare of the Deaf, Federation of Metropolitan District Nursing Associations (Queen Victoria's Jubilee Institute of Nurses), Royal Sanitary Institute, Women's Imperial Health Association, and the Social Welfare Association for London.

This was carried, and it was resolved, on the motion of Dr. Murray Leslie (chairman of the Women's Imperial Health Association), seconded by Mr. A. J. Martin (Vice-Chairman of the National Health Week Committee), that the Social Welfare Association for London be requested to take steps to give effect to the resolutions and that the Local Government Board be asked to allow the Committee to meet at the offices of the Department.

King's College Hospital.

The Committee for the removal of King's College Hospital to South London have just received a cheque for £20,000, being the balance of the gift of £50,000 recently made to the fund by an anonymous donor. By the donor's desire, £4,000 of the total donation is allotted to the sum required for the building of the Medical School in connection with the new hospital.

Croydon Hospital Extension.

The new wing of Croydon Hospital, which has been erected from designs of Mr. Frank Windsor as a memorial to King Edward VII., was opened on Saturday last by the Mayor of Croydon, Alderman Trumble. The new wing provides an isolation department, a ward with 18 cots, bedrooms for nurses, kitchen accommodation, and improvements. Extensions have also been made to the Royal Alfred wing of the hospital. The total cost is £5,500, of which £4,000 has been raised by public subscription. The dedication service was conducted by the Bishop of Croydon, assisted by Canon White-Thomson. Sir Frederick Edridge, Chairman of the Committee, announced that he had received an offer of £1,000 to be paid when the remainder of the balance required had been promised. The Mayor stated that £250 of the amount had been promised during the afternoon.

Medical Report on Osborne.

The report of the House Governor and Medical Superintendent at Osborne for the year ended March 31st last was issued last week. The total admissions numbered 315, of whom 59 were ladies. There was a marked increase in the number of officers treated. It is pointed out that it is not easy to explain the fluctuating admission rate. The Naval and Military medical statistics for 1911 have not yet been published, so that any comparison of the general sick rate of the year under review with previous years is not yet possible. It is noted, however, that the increase has been spread over all branches of the Services both at home and abroad. On the whole the patients benefited much by their residence at Osborne, and their state on discharge is shown as follows:—Recovered, 184; improved, 34; no change, 3; died, 1; and remained in Home on March 31st, 34; total, 256.

The Colonial Office Medical Staff.

We understand that Sir Patrick Manson, M.D., F.R.S., will retire from the post of Medical Adviser to the Colonial Office on August 15th, and that he will be succeeded, on the appointment of the Secretary for the Colonies, by Sir J. Rose Bradford, M.D., F.R.S., as Senior Medical Adviser, and by Dr C. W. Daniels, M.B., M.R.C.P., as Junior Medical Adviser. These appointments will take effect from the date of Sir Patrick Manson's retirement. Mr. W. T. Prout, M.B., late Principal Medical Officer, Sierra Leone, is to be Medical Adviser to the Colonial Office in Liverpool. The King has been pleased to give directions for the appointment of Sir Patrick Manson to be a Knight Grand Cross of the Order of St. Michael and St. George, in recognition of his eminent services in connection with the investigation of the cause and cure of tropical disease.

Holiday Lectures and Drill.

The National League for Physical Education and Improvement is organising a summer school at The Cloisters, Letchworth, during August. There will be theoretical lectures on physical education, health, eugenics, and kindred subjects, and daily practical classes in Swedish drill, peasant dances and games, old English country and Morris dances, swimming, tennis, and many other forms of outdoor exercise and recreation. Each course will last a fortnight, and particulars may be obtained from Miss T. Johnson, The Swedish Institute, Clifton, Bristol.

The Royal Sanitary Institute.

The Royal Sanitary Institute Preliminary Programme of the twenty-seventh Congress, to be held in York from July 29th to August 3rd, has now been issued. H.R.H. Prince Arthur of Connaught, K.G., will open the Health Exhibition on Saturday, June 27th, at 3 p.m., and special services have been arranged in the Cathedral and other churches on the Sunday. Professor Karl Pearson, M.A., LL.B., F.R.S., will deliver the Lecture to the Congress on "Eugenics and the Public Health." Professor Henry R. Kenwood, M.B., D.P.H., F.R.S.E., will deliver the Popular Lecture on "The Healthy Home." Excursions to places of interest in connection with Sanitation, a *Conversazione*, Garden Parties, and other entertainments have been arranged for those attending the Congress. More than 350 authorities, including Foreign and Colonial Governments, Government Departments, County Councils, County Boroughs, other Sanitary Authorities, Universities and Societies have already appointed delegates to the Congress; and, as there are over 4,000 Members and Associates in the Institute, a large attendance is expected. In connection with the Congress, a Health Exhibition of Apparatus and Appliances relating to Health and Domestic use will be held in the Exhibition Buildings, as practical illustration of the appliances and carrying out of the principles and methods discussed at the meetings; it not only serves this purpose, but also an important one in diffusing sanitary knowledge. The local arrangements are in the hands of an influential Local Committee, presided over by the Rt. Hon. the Lord Mayor (Ald. Norman Green), with the Town Clerk (H. Craven), the Medical Officer of Health (E. M. Smith, M.D., D.P.H.), and the City Engineer (F. W. Spurr) as Local Hon. Secretaries.

The following have been elected members of the Institute:—Hugh E. Finch, M.B.Oxon, D.P.H.Lond., District Health Officer, Christchurch, New Zealand; Robert H. Makgill, M.D.Edin., D.P.H.Camb., District Health Officer, Auckland, New Zealand; and Emile Nadeau, M.D., Quebec Immigration Hospital, Quebec, Canada.

Medical Attendance in the Highlands.

It is officially announced that the Chancellor of the Exchequer has appointed a Committee to consider how far the provision of medical attendance in the Highlands and Islands of Scotland is inadequate, and to advise as to the best method of securing a satisfactory medical service therein, regard being had to the duties and responsibilities of the several public authorities operating in such districts. The Committee will consist of the following:—Sir John Dewar, Bart., M.P. for Inverness-shire (Chairman); the Marquis of Tullibardine, Mr. J. Cullen Grierson, Convener for the County of Zetland; Mr. Andrew Lindsay, Convener for the County of Sutherland; Dr. Leslie Mackenzie, Medical Member of the Local Government Board for Scotland; Dr. J. C. M'Vail, Deputy-Chairman of the Scottish Insurance Commission; Dr. A. C. Miller, Medical Officer for the parishes of Kilmallie and Kilmonivaig; Mr. Charles Orrock, Chamberlain of the Lews; Mr. J. L. Robertson, LL.D., Senior Chief Inspector of Schools for Scotland. The Secretary of the Committee will be Mr. M. Beaton, one of the inspectors under the Scottish Insurance Commission.

A Tuberculosis Dispensary for Hampstead.

The Hampstead Borough Council at its meeting last week decided to establish a tuberculosis dispensary and sanctioned the expenditure of £750 per annum for its maintenance. It is suggested that the dispensary should be housed in the projected Health Institute, which is to be the memorial to the late King Edward.

The Peamount Sanatorium Wrecked.

Fifty men, armed with pickaxes and other implements, on Sunday evening last attacked the new sanatorium at Peamount, Co. Dublin, which is being built by the Women's National Health Association, and practically demolished it. Their action is attributed to the hostility of the residents to the establishment of a tuberculosis sanatorium in their locality.

Report of Dublin Prevention Committee on Infantile Mortality.

The Dublin Committee, in its report for the first half of the second year since its inception, states that 80 ladies are at present working as voluntary health visitors under its auspices; 30 others have been trained during the winter, and are now ready to take up this work. Nine hundred mothers and their babies have been visited since last January; 10,800 visits have been paid during that period, 775 bags of coal have been distributed, 400 articles of clothing given to mothers, and 6,585 milk or food certificates have been issued. Under the Early Notification of Births Act, the Public Health Department of the Corporation inform the Secretary of the Committee when and where a birth takes place in the city. The Secretary forwards the name and address to the health visitor, who visits the mother and baby once every ten days till the child is twelve months old. The visitor is supplied with a certain number of milk and coal tickets, which she distributes in necessitous cases. Sewing classes have been established in several parishes, where the visitors instruct poor women how to make babies' clothes. As the work is only starting, the Committee does not feel justified in appealing to mortality returns, so as to institute comparisons for this last year as against previous ones. Its work is principally of an educative character, diffusing knowledge and help in the homes of the very poor.

University of London.

The following have passed the M.D. Examination for Internal and External students:—

Medicine.—S. H. Booth, B.S., Univ. of Leeds; H. C. R. Darling, B.S., and H. S. Furness, B.S., Univ. Coll Hosp.; Rose F. Jordan, B.S., London (R.F.H.) Sch. of Med. for Women; T. S. Lukis, B.S. (University Medal), St. Bartholomew's; E. G. Perodeau, B.S., and C. E. Shattock, B.S., Univ. Coll. Hosp.; N. Tattersall, B.S., Manchester Univ.; H. A. Treadgold, B.S., Camb. and King's Coll. Hosp.; H. O. West, B.S., King's Coll. Hosp.; S. Wyard, B.S., Univ. Coll., Cardiff, and Univ. Coll. Hosp.

Mental Diseases and Psychology.—B. Hart, Univ. Coll. Hosp.; G. E. Peachell, B.S., St. Mary's.

Midwifery and Diseases of Women.—H. L. Barker, B.S., St. Mary's; R. L. E. Downer, B.S., St. Bartholomew's; H. B. Foster, Guy's; G. B. Harland, B.S., Univ. of Durham; G. Maxted, B.S. (University Medal), Guy's.

State Medicine.—W. A. Daley, B.S., B.Sc., and W. Scarisbrick, B.S., B.Sc., Univ. of Liverpool.

Tropical Medicine.—Ardeshir Koyaji Contractor, B.S., London Sch. of Trop. Med. and Univ. Coll. Hosp.; F. C. McCombie, King's Coll. Hosp. and London Sch. of Trop. Med.; Dossibai Rustomji C. Patell, B.S., London Sch. of Trop. Med.; and R. O. Sibley, St. Mary's.

University of Oxford.

The following candidates have satisfied the examiners for the Diploma in Public Health:—

Part II.—W. F. Rhodes and W. D. Watson.

Parts I. and II.—L. E. Acomb, W. A. Berry, F. G. Caley, H. K. Fry, and J. P. Johnson.

Part I.—Ram Swarup Agrawal, R. Donald, Kalka Prasad Mather, and A. H. Tebbutt.

University of Cambridge.

At a Congregation held on July 11th the following degrees were conferred:—

M.B. and B.C.—A. M. Bodkin, King's; J. S. Burn, J. W. H. Chunn, and M. Donaldson, Trinity; J. R. Marrack and C. H. G. Philp, St. John's; E. Rayner, Pembroke; R. Ellis, Cath.

M.B.—W. Broughton-Alcock, Trin. Hall.

B.C.—J. W. Dew, Clare; W. L. Johnson, Pembroke; C. B. Wainwright and Ll. McI. Weeks, Caius; H. F. Wilson and C. R. Wright, Christ's; J. M. Jarvie, Emmanuel; A. E. Bonny and W. J. Fison, Sidney; E. F. W. Grellier, Downing.

University of Bristol.

At the third examination for the degree of B.D.S. during the present month, Mr. Reginald H. Basker secured a pass; and Mr. Alfred W. Adams and Mr. Frank K. Hayman passed the second examination for the degree of B.D.S.

Examination for the Degree of M.D.—Pass with honours, John W. Taylor.

Final Examination for the Degrees of M.B., Ch.B.—Pass: Alfred G. T. Fisher, Henry W. Goodden, Chas. H. Hart, Vivian St. Leger Pinnock. Part I. only: P. Emil Christofferson and Claude Kingston.

Examination for the Diploma in Public Health.—Part I. only: Thomas Aubrey, Sidney Bazalgette, Alexander H. Finch and Wallace Pomeroy.

Society of Apothecaries of London.

The following candidates having passed the necessary examinations, have been awarded the L.S.A., entitling them to practise Medicine, Surgery and Midwifery:—A. E. Bullock, L. M. Ladell and A. J. Tozer.

NOTICES TO CORRESPONDENTS, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Dr. J. Donald (Liscard).—The product, "Colloid copper," referred to by Dr. de Gers, in his lecture (Medical Press, July 3rd) on "Decancerisation," is little known in this country, although commonly used in France. The only chemists at which we have been able to learn it is stocked in London are Messrs. Wilcox, Jozeau and Co., Haymarket.

Dr. P. N. R. (Hants.)—Of the localised forms of hyperidrosis, the axillary and inguinal are, according to Dr. Belot, the most amenable to treatment by X-rays, the most appropriate dose being 4H units at a distance of about 35cm.

MEDICAL MISSION WORK IN UGANDA.

According to the last report the Mengo Medical Mission Hospital in Uganda, under the control of the Church Missionary Society has relieved an immense amount of physical suffering. No needy case is ever refused; the hospital doors stand open day and night. During the year the buildings of the hospital have been added to, the equipment of the wards and operating-rooms has been greatly improved, and a special hospital has been built for Europeans. The number of in-patients received into the hospital and its dispensaries during the year was 2,081, and there were 72,445 attendances of out-patients. Some 25,000 prescriptions were dispensed, and over seven tons of medicines and dressings were used.

Dr. M. S. (Warwick).—The subject is fully dealt with in "The Treasury of Human Inheritance," Parts I. and II., issued by the Galton Laboratory, price 14s. net.

MORPHIA AND COCAINE IN INDIA.

Speaking in the House of Commons last week, Mr. Montagu, in reply to Sir J. D. Rees, said "With a view to control the use of morphia and cocaine in India, their importation by post is altogether prohibited, and their importation by other means is severely restricted, and is limited to persons holding permits issued by prescribed authorities. The manufacture of morphia from illicit opium by private persons is prohibited, and the amount of morphia which a private person may possess is limited. Transport from place to place is carefully regulated, as is also sale, both wholesale and retail. As regards cocaine, its sale is restricted to chemists and druggists holding licences, and sale by them to private persons must be for bona-fide medicinal purposes and on the prescription of a qualified medical practitioner."

M.D. (Bristol).—The diagnosis of whether or not a growth is of a malignant type can be determined by a blood examination after the Shaw-Mackenzie method.

Excelsior.—The latest reports of the vaccine treatment of enteric fever in India indicate a firm belief in its efficacy among those having personal knowledge of its results. Confirmation of this belief is shown in the fact that in the United States army the inoculations are now compulsory.

Appointments.

Bradford, Sir J. Rose, K.C.M.G., F.R.S., Senior Medical Adviser to the Colonial Office.

Brook, T. Stanbury, M.R.C.S., L.R.C.P.Lond., Medical Officer of Health to the Chingford Urban District Council.

Clifford, W., L.R.C.S.Irel., L.K.Q.C.P.Irel., Certifying Surgeon under the Factory and Workshop Acts for the Adare District of the county of Limerick.

Daniels, C W., M.B.Cantab., M.R.C.P.Lond., Junior Medical Adviser to the Colonial Office.

Gelle, Ernest S., M.B., B.S.Durh., House Surgeon to the Italian Hospital, Queen Square, W.C.

Leishman, A., L.F.P.S.Glasg., Assistant Medical Officer to the Teesdale Board of Guardians.

Reece, Richard, M.D.Cantab., D.P.H., Assistant Medical Officer to the Local Government Board.

Shaw, A., M.D.Glasg., Certifying Surgeon under the Factory and Workshop Acts for the St. Austell District of the county of Cornwall.

Vacancies.

Down County Council.—Medical Superintendent. Salary £500 per annum, with an allowance of £150 per annum, for travelling expenses. Applications to the Secretary, Council Offices, Courthouse, Downpatrick.

London County Asylum, Colney Hatch, New Southgate, N.—Junior Assistant Medical Officer. Salary £170 per annum, with board, furnished apartments, and washing. Applications to H. F. Keene, Clerk of the Asylums' Committee, Asylums' Committee Office, 6 Waterloo Place, S.W.

Stockport Union.—Stepping Hill Hospital.—Resident Assistant Medical Officer. Salary £130 per annum, with furnished apartments, rations, etc. Applications to Charles F. Johnson, Clerk to the Guardians, Union Offices, Shaw Heath, Stockport.

Gravesend Hospital.—House Surgeon. Salary £100 per annum, with board, and residence. Applications to W. Pearson, Secretary.

Hereford County and City Asylum.—Assistant Medical Officer. Salary £170 per annum, with board, lodging, washing, etc. Applications to Medical Superintendent, Asylum, Burghill, Hereford.

Macclesfield General Infirmary.—Senior House Surgeon. Salary £100 per annum, with board and residence. Applications to the Chairman of the House Committee.

Liverpool Dispensaries.—Head Surgeon. Salary £170 per annum, with board and apartments. Applications to the Secretary, 56 Vauxhall Road, Liverpool.

Queen Mary's Hospital for Children, Carshalton, Surrey.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Clerk to the Board, Embankment, London, E.C.

Staffordshire County Asylum.—Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board, and washing. Applications to the Medical Superintendent.

Brixton Dispensary, Water Lane, S.W.—Resident Medical Officer. Salary £175 per annum, with furnished apartments, attendance, coal, and gas. Applications to W. Halliday, Secretary.

Staffordshire General Infirmary, Stafford.—House Surgeon. Salary £120 per annum, with board, residence, and laundry. Applications to Richard Battle, Secretary, Stafford.

Southampton Free Eye Hospital.—House Surgeon. Salary £100 per annum, with board, lodging, and laundry. Applications to E. Burton, Hon. Secretary.

University of Birmingham.—Lecturer in Physiological Department. Salary £200 per annum. Applications to Geo. H. Morley, Secretary.

Carnarvonshire and Anglesey Infirmary, Bangor.—House Surgeon. Salary £100 per annum, with board, washing, and lodging in the house. Applications to the Hon. Secretary.

Nottingham General Dispensary.—Assistant Resident Surgeon. Salary £160 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheesman, Secretary, 12 Low Pavement, Nottingham.

Royal Lancaster Infirmary.—House Surgeon. Salary £100 per annum, with residence, board, attendance, and washing. Applications to Neville Holden, Hon. Secretary.

Births.

Crimp.—On July 16th, at Brackenhurst, Walton-on-Thames, the wife of G. L. Crimp, M.B., B.C., B.A. (Cantab), of a son. Both doing well.

Pooley.—On July 20th, at 15 Gladstone Road, Ranmoor, Sheffield, the wife of G. H. Pooley, F.R.C.S., of a son.

Marriages.

Bullock—Phillips.—On July 10th, at Holy Trinity Church, Maitland, Nova Scotia, William Bullock, of Port Colborne, Ontario, only son of the late Frederick William Bullock, of Halifax, and grandson of the Very Revd. William Bullock, first Dean of Nova Scotia, to Norah Stuart, only daughter of Stephen Thos. Phillips, L.R.C.P., etc., of Maitland, N.S., late of Wellington, Hereford.

Deaths.

Abrahams.—On July 22nd, at 14 Welbeck Street, W., Jane, widow of Dr. B. L. Abrahams, and dearly beloved daughter of A. J. Simmons.

Lloyd-Davies.—On July 16th, at Wolverhampton, William Allan Lloyd-Davies, L.R.C.P. and S.Edin., L.F.P.S.Glasg., aged 47.

DOCTOR'S RESIDENCE,

Gordon Square, London, W.C.—To be let, one of the best houses in this favourite square; seven bedrooms, four excellent reception-rooms, and commodious offices.—Particulars of Messrs. Edwin Fox, Bousfield, Burnetts, and Baddley, 99 Gresham Street, City.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, JULY 31, 1912. No. 5.

NOTES AND COMMENTS.

Quality Before Quantity. DURING the week that is past much has been heard of the various problems connected with race culture, especially with regard to the part played by the medical profession in raising the physical and mental standard of generations yet unborn. Public interest has already been aroused in the new science of eugenics, while the subject has been brought in a practical way before the notice of medical men and scientists in general at the first international Eugenics Congress, which began its sittings last week at the University of London under the presidency of Major Leonard Darwin. That a more conscious selection must replace the blind forces of natural selection has long been the ardent desire of those who yearn for the improvement of posterity. It certainly stands to reason that some check must be placed upon the propagation of the race by those who are morally and physically degenerate. The maintenance of a high birth-rate, unless associated with a strong progeny, is not necessarily an indication of the upward progress of a nation. As we have been reminded in the Presidential Address before the annual meeting of the British Medical Association, held at Liverpool last week, we must "breed for intelligence." It is quality that tells ultimately in the building up of a sound and healthy race, not merely quantity at any price. It is largely in the hands of the medical profession to point out the paths along which the moral, intellectual and physical evolution of the race can be accomplished.

Temperance Workers and Drink Philanthropists. ONE of the not least interesting functions of the Liverpool meeting was the Annual Temperance Breakfast in the Walker Art Gallery. After a substantial meal at 8 a.m., a large gathering was entertained by speeches which had the merit of brevity, in view of the sectional meetings which began at 10. The chairman, Mr. A. Guthrie, is a well-known local temperance worker. He alluded to the fact that in Liverpool no less than 800 licences had been extinguished, and that before the passage of recent legislation that town had for many years excluded children from the public-houses by virtue of a special Act. In his practical address, Dr. Mott claimed that the tolerance of the temperance party in the Association could not have been better demonstrated than by their readiness to meet in a public building founded by the munificence of a great local brewer and distiller. In spite of the adage which warns us against looking a gift horse in the mouth, it is nevertheless a matter of regret that some medical charities should in some cases derive vast sums of money from the drink traffic, from money-lending, from stock exchange speculation, company promoting, and other more or less immoral sources of wealth.

The Preponderance of Female Population. THE 36,070,492 persons enumerated in England and Wales show an excess of 1,179,276 females over males. These figures want some correction as regards the males engaged in the Services abroad. The solid fact remains, however, that since the year 1821 the female preponderance has, on the whole, steadily increased. Where is all this to end—or is it even desirable, in the best future interests of society, that women should not get the upper hand? Why should not man, who has hitherto been the dominant sex, gracefully resign that position in favour of his womenfolk? It would be well, perhaps, to bring about the change with some amount of deliberation, inasmuch as the world's physical fighting appears to be by no means at an end—that is to say, if we may judge from the vast and increasing amount spent upon armaments by nations in all parts of the world. Be that as it may, if we wish to readjust the sex balance it may be done without any undue tax upon the resources of civilisation by calling in the aid of medical science. The great initial fact with which we are faced is that, so far as the actual births are concerned, the male sex is predominant—but boy babies die off more rapidly than girl babies.

Why Boy Babies Die. A COLLECTIVE medical inquiry into the causes of the excess in male infantile mortality might yield important practical results. The explanation that used to be given in the text-books was that the male infant was larger than the female both in head and in body, and consequently was liable to greater injury during parturition. If that alone were the essential determining condition of the excess, it might be remedied without undue strain upon the resources even of the hybrid midwife to whom has been entrusted the duty of superintending the entry of our offspring into the world. But the whole of the male excess is not accounted for in infancy, for the women are more resistant after middle age. It is worthy of note that the feminine excess was most marked in Surrey, Middlesex, London and the Isle of Wight. It seems a pity that these women should be unable to follow the men who have freely migrated to the Colonies. It is worthy of note that the proportion of prison population was only 139 females to 1,000 males, even after allowing for the Suffrage Movement. In only one European country—Norway—did the female preponderance exceed that of our own country.

An Epileptic Homicide.

A week or two ago we commented on the fact that a man had been found naked in a London street early one morning, brandishing an axe, wherewith he seriously assaulted a constable. At the time it was suggested in these columns that the prisoner's actions were of such a nature as *primâ facie* to suggest the absolute necessity of an inquiry into the state of his mind. For once in a way the police authorities have done the right thing, and a medical investigation showed that the man suffered from epileptic fits, and at times did not know what he was doing. The magistrate, Alderman Burnett, thereupon dismissed the charge and gave the prisoner's mother a letter for a suitable hospital. We may point out that to hand over a homicidal epileptic to the care of a hospital is to court future disaster. A hospital is unfitted to deal with such a patient, and we suggest the proper method would have been to secure a proper investigation by competent alienists, with a view, if necessary, to detention in Broadmoor. If this man ranges the streets again with an axe the result may be a tragedy for which the police would be morally responsible. What medical man versed in insanity would have sanctioned such a step?

An Indian Medical Service. For Women.

The question of the position of medical women in India has been before the India Office and the Government of India for some time past. It has been felt that the problem of medical aid for the female population of India would be met, to a great extent, by the establishment of training schools for native women. The deputation which waited recently upon the Secretary of State for India were of the opinion that a central administrative body in India (which need not involve the disruption of the Dufferin Fund) should be created for the purpose of managing the women's medical department, and for the establishment of teaching hospitals, efficiently staffed, where Indian women graduates could receive adequate training in midwifery and diseases of women and children. It is not, we gather, the intention of those best informed with regard to Indian social conditions, to run such a service on exactly the same lines as the Indian Medical Service, for it is well known that the tendency of the Indian Government is in the direction of encouraging private practitioners rather than for the provision of medical aid for the general population as a State affair.

LEADING ARTICLES.

NATIONAL INSURANCE ACT NEGOTIATIONS AT AN END!

The eightieth annual meeting of the British Medical Association, which concluded its session at Liverpool last week, must be regarded as the most momentous ever held within the annals of the Association. The main fact stands out with startling prominence, that in the report stage of the annual representative meeting it was determined by an overwhelming majority to break off negotiations with the Chancellor of the Exchequer on the question of medical benefits, except on terms already laid down, and to call on all medical men to refuse or resign appointments under the Act. The only exception permitted was in regard to sanatorium benefit, "provided it is carried out in accordance with the wishes of the Association, until such time as the Government has satisfied the Association that its demands will be met." This weighty decision must fall upon the medical profession with the force of finality that necessarily attends any profound resolution, whether affecting a nation or a large section of the community. It marks the end of negotiations that medical men have felt all along were conducted on the side of the Government in a spirit of political juggling rather than of plain, straightforward dealing. Only a few days before the Liverpool meeting, after the Act had come into operation, a restricted actuarial inquiry was conducted into medical incomes. A more grotesque placing of the cart before the horse it would be difficult to imagine. In spite of his great political abilities and experience, it seems fairly obvious that Mr. Lloyd George has fallen into grave errors in his attempt to cajole the medical profession into playing the part of catspaw for the vicarious philanthropy of the Liberal party. In the early stages he ignored the profession altogether, and then fell into the error of regarding it as synonymous with the British Medical Association. As to the latter body, he apparently thought that by securing the Council he secured the members, but the outcry at the appointment of the Association Medical Secretary, Mr. Smith Whitaker, to the Insurance Commissioners must have come as a somewhat rude awakening from those beliefs. As the outcome of this curious string of transactions, the British Medical Association has become in fact the spokesman of a profession that is practically united for the purpose of collective defence. It has become more and more apparent for the past six months that Mr. Lloyd George, in spite of much show of friendship and conciliation, has made no concession of any material value to the medical profession. The *Daily News*, to which we turn as an official Liberal organ, has reflected the official view with candour throughout every stage of the Insurance legislation. At first that estimable journal scouted the "doctors' revolt," and treated their protests with sarcasm of fine Fleet Street flavour. Later it became somewhat alarmed, and handed over the subject to "P. W. W.," a political writer of ability, but, as a rule, narrow and ill-informed in outside social matters. Lately it has entrusted one of its best writers, Mr. Harold Spender, to deal with the doctors, but he can hardly be said to have thrown much light upon the discussion. Another suggestive fact is that it has lately turned for an article to Dr. Addison, M.P., who, rightly or wrongly, has been regarded by many medical men as answerable for a good deal of the Chancellor's misinformation as to the inner conditions and feeling of the medical profession. All along the *Daily News* has insisted that medical men have been actuated by political motives. So often and so industriously has this absurd statement been circulated that the challenge has been accepted by The Medical Press and Circular, and we have deliberately advised medical men, regardless of their individual polit views, to oppose tooth and nail at the next Parliamentary election the Government which has so unjustly violated their private interests. The aggregate political weight of the medical profession is enormous, and he must indeed be a bold Minister who would face an issue of that kind. Meanwhile, the point now before the medical profession is the speedy organisation of a public medical service, the control of which will be in their own hands. The Chancellor of the Exchequer is not a weak man, neither does he allow grass to grow under his feet, and his next move in the matter is hardly likely to be long delayed. His characteristic obstinacy of character has been shown in the recent negotiations, and it now remains to be seen what will be the outcome of his struggle with a thoroughly aroused profession. It would be interesting to speculate what his attitude would be were Parliament to force contract service upon the lawyers; but law is just as necessary as medicine if the average poor citizen is to enjoy to the full the blessings of life in a civilised community. That which is politically just for medical men can hardly be wrong for the lawyers, even though it be possibly less expedient for a strenuous Cabinet Minister. Meanwhile, it looks very much like a declaration of war to the knife.

THE INFLUENCES MODIFYING THE CIRCULATION.

One result of modern physiological research has been to show the intimate relations that exist between the various systems of the body, more especially with regard to the circulatory mechanism. The whole of the vascular system may be profoundly influenced, for instance, as the result of disturbances of secretion of one or other of the group of mysterious organs known as the ductless glands. Recent research has materially increased our knowledge of the functions of these bodies, and practical therapeutics has considerably gained thereby. We have only to contrast the present-day treatment of such affections as Graves's disease, myxœdema, and Addisonism with that of the period when the active principles of the secretions of the ductless glands were unknown. In the address in medicine delivered at the annual meeting of the British Medical Association last week, a full abstract of which appears in our columns, Dr. G. A. Gibson dealt with this subject in a masterly fashion, showing most conclusively that the "chemical messenger" or hormone contained in these secretions is able to influence glandular activity, and through it the circulatory mechanism, in a specific manner. These powerful agents appear to act upon many, perhaps all, tissues, some by affecting the local processes of repair and removal, others by acting directly upon the muscular wall of the blood vessels, and others, again, through the medium of the sympathetic and vaso-motor nervous systems. Thus, the effect of the administration of suprarenal extract upon the blood vessels is to cause marked constriction, except in those of the heart and lungs, while pituitary extract contains at least two substances, one of which causes contraction and the other dilatation. The secretion of the thyroid gland is capable of being influenced by sudden shocks, such as a severe fright, symptoms of exophthalmic goitre supervening, perhaps, in the course of a few hours. It has also been ascertained more recently that profound nervous influences may produce definite changes in the suprarenal secretion. The nervous and glandular systems would appear, therefore, to be intimately correlated with the vascular mechanism, and both clinical observation and experimental research strengthen the hypothesis that the somewhat obscure diseases under consideration have a dual or even a triple origin. That they may be due, directly, to circulatory disturbances appears probable on superficial examination, but if we trace the ætiology further back still, the primary cause will be found to reside in some defect in the glandular or nervous control over the heart and blood vessels themselves. As our pharmacological knowledge of the active principles of the ductless glands advances, there is reason to believe that many diseased conditions will become more amenable to treatment. A greater devotion to the three sister studies of physiology, pathology, and pharmacology must result, as Dr. Gibson has pointed out, in a practical advance in the therapeutics of disease.

CURRENT TOPICS.

The Eugenic Ideal.

The opening last week of the First International Eugenic Congress marks the deep interest of scientists, philosophers, and statesmen alike in the youngest of the ancillary sciences of medicine. Even the public, or, at any rate, the more enlightened section thereof, are beginning to realise what it means to live for posterity, and to understand that, for the future of the race, it is as important to breed from sound stock in the case of human beings as it is for the domestic animals. Some of the more complex of eugenic problems were touched upon in the admirable speech delivered by Mr. Balfour at the international banquet of the Congress at the Hotel Cecil, who said that the whole point of eugenics was that it rejected mere numbers. The Lord Mayor of London, with his keen professional insight, rightly stated, in proposing the toast of "The Eugenic Ideal," that the problem of the greatest social importance was the inculcation of the responsibilities of marriage among the youth of the present day. Eugenics must be taught in the cottage as well as in the lecture-hall. Indeed, the tactful persuasion and influence of medical practitioners, clergymen, teachers, and health-visitors will do much to instil higher ideals of marriage with special reference to the future progeny, while at the same time they can popularise a greater study of the laws of heredity among the masses. The public must be convinced by every possible means that the acquisition of this knowledge is one of the most pressing necessities of the age.

Alcohol and Disease.

One of the most significant facts of modern therapeutics and social economics is the changed attitude of the medical profession concerning the use of alcohol in disease. Regarded merely as a beverage in health there will always remain differences of opinion, but there can be no doubt whatever that alcohol does not hold the same place in the pharmacopœia as it once did. Hospital staffs no longer order the daily quantities of beer, wine, or spirits to their patients that were customary a generation ago. In fact, with the general wave of temperance that has undoubtedly swept over the country, owing to changed habits on the part of the people, has come a reluctance to employ a substance the administration of which was felt to carry with it certain risks. It is interesting, therefore, to note that at the recent breakfast held at Liverpool last week under the auspices of the National Temperance League, the two principal medical speakers, Sir James Barr and Professor F. W. Mott, were neither of them total abstainers. Both recognised fully that too much alcohol was consumed at the present day, but both acknowledged that a great advance had been made in the direction of temperance. Both, again, stated that they did not order alcohol in disease except in small quantities, or in exceptional cases. Such testimony from unbiassed practising physicians is in itself a striking confirmation of modern experimental research into the action of alcohol upon the physical and mental economy. It seems likely, therefore, that the administration of alcohol in sickness will be yet more scientifically conducted in the future, having due regard to its limitations and drawbacks.

Hospital Efficiency.

It is not improbable that in the course of the next few years the attention of the public will be turned much more to hospital administration and efficiency than it has been in the past. Discussion of medical benefits under any scheme of National Insurance must embrace careful consideration of hospital management. In America there is a widespread feeling that hospital machinery has a large coefficient of waste energy, and this the leaders in medicine are using all their powers to reduce. The opening address at the Surgical Section of the American Medical Association held last month dealt with the hospital problem, a fact which shows how important this subject is considered. The view is put forward that the only place for the surgically ill is hospital, and that not a nursing home, but a general hospital, on the same plan as our large charity hospitals. Some of the leading American surgeons will not operate unless the patient comes to the general hospital, and the latter contains a large number of private rooms. This procedure is not only more convenient for the busy surgeon, as it saves the time usually occupied in going to the private hospitals or the patient's home, but it is also of advantage to the patient in that he is nursed by a staff familiar with the surgeon's methods, and in a place possessing, as a rule, more facilities for emergencies than the ordinary nursing home. Moreover, for the purposes of clinical research and statistical inquiry, it is much more convenient to have all one's patients in the same institution. Moreover, the fees received from private patients would be of considerable service in the general upkeep of the hospital. It is more economical to maintain one large hospital than a large number of small, and often inefficient, institutions. Another point which is under discussion at present has to do with the allocation of cases to the various members of the staff. The Massachusetts General Hospital has adopted the plan of giving all the cases of cancer of the uterus to one surgeon, those of biliary disease to another, and so on, each surgeon restricting himself to a special branch for a certain time. By this means each surgeon gets much more practice in any given line of work than he could possibly obtain by the older method, and as a result becomes more efficient therein. There are, of course, arguments against both these suggestions, but it is always well to know how problems are dealt with elsewhere.

The Sanatorium Benefit.

It is a matter of importance, both to the public and the profession, that the representative meeting of the British Medical Association has expressed itself as not hostile to the administration of the sanatorium benefit, "provided it is carried on in accordance with the wishes of the Association." There is now no obstacle on the part of the medical profession to the satisfactory working of this benefit, which can be made of great service in the public health work of the country. There are, however, certain anomalies in the position taken by the British Medical Association. While permitting its members to accept offices for the administration of the benefit, it has ordered their withdrawal from all provisional insurance committees, that is to say, from the committees who have to make all arrangements for the administration of the benefit. It is obvious that the arrangements are less likely to be satisfactory if medical men have no share in making them. In the hurry of business at the meeting this point and some others seem to have been overlooked. We hope that the Council may find some way out of the difficulty, as otherwise policies and schemes for the sanatorium benefit may be put into operation without proper advice.

Vacation Schools.

The custom has been growing of late years of attending classes or courses of instruction in some special subject in what is usually regarded as holiday time. Primarily the movement was started in order to give school-teachers and senior students an opportunity of acquiring special knowledge, practical or otherwise, in some branch of learning in which they were interested, or in which they desired to become more proficient. Frequently such courses are combined with pleasure excursions, something after the manner of the annual meeting of the British Medical Association, for instance, and, thus, little by little, the movement has grown to such an extent that quite a large percentage of the community combines instruction with recreation during the yearly holiday. It may well be asked whether, on medical grounds, such a union of work and play is strictly advisable, or if, indeed, it may not defeat its own ends. The answer is to be found, we think, in the mental and physical attitude of the individual who attends such a vacation course. The whole essence of a healthful holiday is that it should be as much unlike the ordinary routine as possible, so that the tired mental worker will not, physiologically, derive so much benefit from his brief period of change if it consist even in part of teaching or listening to lectures. Such may well be advised to stay away, while others who have not been subjected to severe strain of this kind may derive considerable benefit from attending a vacation school. Anything like mental or physical over-exertion when on a holiday should be strenuously avoided.

Sanitation in India.

It is announced that further steps are about to be taken for improving and strengthening the sanitary service in India. At present the schemes include a greater decentralisation of control, and a widening of the field of recruitment by throwing open the higher posts to fully qualified Indians of proved aptitude. The local Governments are to be empowered to select their own sanitary commissioners from officers serving in provincial sanitary departments, under certain limitations as to previous sanction. The existing number of deputy sanitary commissioners is inadequate in more than one province, the area served by one of these officers in Madras being more than 129,000 square miles with a population of 36½ millions. It has been decided to create eight additional appointments of this class. The deputy sanitary commissionerships will no longer be reserved for officers of the Indian Medical Service, and Indians possessing the necessary qualifications will be eligible. The candidate must hold a British diploma in public health and be a properly qualified medical practitioner. Health officers of the first class are also to be appointed for the larger municipalities and of the second class for the smaller towns, to supplement the work of the district Civil surgeons, who, as a rule, are the only health officers of the towns of their respective districts. A health officer of the first class must have a registrable medical qualification and a British diploma in public health. It is hoped that it may be possible to remove the second restriction so soon as arrangements can be made in India which will enable Indians trained there to become health officers of the first class.

PERSONAL.

H.M. Queen Alexandra, accompanied by H.M. Queen Amelie of Portugal, paid a visit last week to the Lord Mayor Treloar Cripples' Hospital and College.

H.M. Queen Amelie visited the Royal Free Hospital last week, inspecting the wards of the institution.

Mr. H. Tyrell Gray, F.R.C.S., has been appointed an Assistant Surgeon to the West London Hospital.

Mr. Oswald L. Addison, F.R.C.S., has been appointed an Assistant Surgeon to the West London Hospital.

Mr. Sydney Gray Macdonald, F.R.C.S., has been appointed Surgical Registrar to the West London Hospital.

Dr. Seymour Taylor, M.D., F.R.C.P., has been appointed Consulting Physician to the West London Hospital.

Mr. F. Swinford Edwards, F.R.C.S., has been appointed Consulting Surgeon to the West London Hospital.

Mr. W. S. Edmond, F.R C.S., has been appointed Surgeon to the X-ray Department of the Salop Infirmary.

Dr. Llewellyn Williams, of Wrexham, has been appointed Medical Inspector to the Welsh Insurance Commission.

Mr. F. E. Scrase, F.R.C.S., D.P.H., has been appointed Medical Officer of Health for the Borough of Hampstead.

Mr. Donald Armour, M.B., M.R.C.P.Lond., F.R.C.S., has been appointed Surgeon to the West London Hospital.

Mr. Harold Leader, M.B., M.R.C.S., L.R.C.P., has been appointed Lecturer in Diseases of Children in the University of Sheffield.

Dr. A. J. W. Stephen, M.B., Ch.B., D.P.H., has been appointed Medical Officer of Health to the Weetslade Urban District Council.

Sir William Thornley Stoker, Bart., M.D., late of Dublin, who died on June 1st, aged 67, left personal estate in the United Kingdom valued at £10,315.

Mr. Sidney Arthur Boyd, M.S.Lond., F.R.C.S., has been appointed Surgeon to Out-patients at the Hampstead General and North-West London Hospital.

Dr. F. Wood-Jones, M.B., D.Sc.Lond., has been appointed Lecturer and head of the Department of Anatomy at the London (Royal Free Hospital) School of Medicine for Women.

Sir David Ferrier, M.D., F.R.S., has been awarded the Moxon Gold Medal of the Royal College of Physicians of London, given triennially for distinguished research in clinical medicine.

Mr. W. Netherville Barron, M.V.O., M.R.C.S., now Surgeon Apothecary to their Royal Highnesses Prince and Princess Christian of Schleswig-Holstein, has been appointed to be their Physician in Ordinary.

A CLINICAL LECTURE
ON
THE TREATMENT OF DECUBITUS.

By ALEXANDER ZWEIG, M.D.,
Physician to the City Asylum, Dalldorf, Berlin.

[Specially Reported for this Journal.]

In the year 1884, my chief, Herr Geheimrath Sander, at the suggestion of Bruns, as a new method of bedding for cases of paralysis with uncleanness, introduced prepared wood wool into the asylum, and after some months' experience with it made a report on it in the *Berliner Klinischen Wochenschrift.* Up to now we have kept to the wood wool uninterruptedly, and this fact alone shows that this method of treatment has maintained its ground. Wood wool is used in some institutions, but it always seems to be so little known that it is deserving of a fresh word of praise. It struck me that the large numbers of both foreign and native physicians who visited the institution last year, and who passed wonderingly through the wards, looked upon the use of wood wool as a "new method." In our female infirm wards there are on an average 24 untidy more or less weak-minded patients. Last year it happened that in two instances only were we unable to get a case of decubitus to heal up; one of the two patients was at the same time suffering from renal disease (chronic nephritis), the other from diabetes; complications the injurious action of which on the tissues is well known. With these results the special methods employed along with the wood wool must be of interest.

We procure the wood wool, as before, from the firm of Paul Hartmann, Heidenheim a.B., Würtemberg. It is prepared from the aspen (*populus tremula*), which is cut up on some specially prepared cutting machines. The shavings are then cleaned and deprived of their ammonia, then put through an antisepticising process, impregnated with sublimate, and lastly reduced to the form of elastic wood wool in special machines. They are employed in the manner described by Sander, so that I cannot do better than make use of his own words: "The patient is placed on the wood wool without any other material, without linen, indiarubber, or any other material. To this end, the floor of the bed not being pierced through, the sides of it are slightly raised, the wood wool is lightly spread about 7 inches deep, an ordinary cushion is supplied for the head, the patient placed in bed and covered up. It is to be noted that the wood wool is not placed in a bag as filling for a mattress, and that the bedclothes are omitted. I have decided to omit even the shirt, as it so often gets into the folds and creases and gives the first impetus to pressure gangrene. The material in which the patient lies is agreeably cool, soft, 'giving,' and elastic. It clings to the contours of the body so closely that after a time a true impression of the outlines of the back is given off as with a plaster cast. The urine is soaked up by the wood wool, and as far as this gets moist it is removed with a small shovel. The fæcal matter is treated in a similar way." The wood wool is teased out and softened and stirred up every day, and that which is used up is replaced by fresh.

The advantages of wood wool, without any further remarks, are sufficiently clear. Every practitioner knows how difficult it is to handle a large water bed and how easily, even with the greatest care, folds are formed in the lower part of the bedclothes, the enormous amount of washing demanded when patients are soiled, etc. As Sander had pointed out, wood wool is useful not only in preventing the advance of a decubitus already formed, but it has an active curative effect. In accordance with this view, patients who are seriously ill have submitted to the wood wool treatment quite independently of its uses as a cleanser, and very gratifying results have been obtained. Last year, in some specially severe cases, I have supported the action of the wood wool by special treatment of the decubitus. The soft bedding impregnated with sublimate has simply the aim of protecting the body from pressure, of soaking up the moisture, thus protecting the skin from its injurious effects, removal of suppuration in a quick and easy manner, all these things are, of course, of great moment. Besides this the patients had a cleansing bath every day, and parts that seem in danger are rubbed with vinegar water (one tablespoonful of officinal dilute acetic acid to 1 litre of water). This is done every time there is any soiling. The camphor wine formerly in use is much dearer, and it is in no way better than the acetic acid.

Simply by the use of these means decubitus was warded off in many cases. If any redness was noticed, a warm camomile bath was given once or twice a day; when the patient was unable to sit up a sitz bath was given instead. Although "bath camomile" was not the kind employed but an inferior kind of "camomile" tea, the cost of such a bath was within moderate bounds. The duration of a bath varied according to the degree of redness, the general condition of the patient, and the heart, and was kept up as long as possible. I might say here that in severe cases I made daily use of the bath with advantage for a week together, the patient being kept in the bath as long as possible.

If, in spite of such measures, there was any loss of substance or the period of redness was overlooked, zinc ointment was rubbed into the affected part, but without any dressing. In this way we succeeded in all cases in decubitus appearing during the patient's stay in the hospital—*i.e.*, in all initial stages.

In all other severe cases—in all patients coming in with decubitus—I have used with good effect:—

℞ Arg. nit., 1.0;
Bals. Peru, 20.0;
Vaselini ad 100.0.

This ointment is spread on to a thin layer of gauze and placed all over and around the decubitus and renewed daily. The gauze is then covered with a layer of lint and fastened with sticking plaster. The plaster made use of is Remmler's "Collem" adhesive plaster. Irritations of the skin, in spite of prolonged use, were never observed. On every removal of the plaster all shreds of adhering plaster were carefully removed. Even in these cases also treatment by sitz camomile baths was all that was needed. I should say here that in spite of the concentration of the Peruvian balsam no effect on the kidneys was ever noticed. But, considering the situation of the different places, very little could have become absorbed. On the other hand, caution should be observed in the use of the ointment, especially as regards the skin near the edges of the decubitus. In order to protect these parts from the Peru balsam, they should be first covered with zinc ointment.

The treatment becomes still more energetic when necrosis is present. Here all shreds of necrosed tissue are carefully removed with the scissors, frequently the floor of the ulcer is curetted as well as the lateral parts. By choice the patient is then put directly into the camomile bath and kept there the whole day. Here the permanent bath arrangements were important, especially as regarded the regulation of the temperature. I did not arrange for a constant outflow in view of the waste of camomile. By this method of use we were able to give an eight-hours' camomile bath for about three pence. As these patients were mostly marantic, they were given as a precautionary measure strophanthus; no collapse was ever observed. For various reasons the removal of the necrotic shreds is advisable. In the first place they prevent applications reaching the still living tissues, and diminish their usefulness; further, the removal diminishes the secretions, and through each of these factors shortens the period of active treatment. The curetting also effects a lively flow of blood through the healthy tisues bordering on the necrosis. The contents of skin pockets I sometimes succeeded in cleaning by peroxyd spray, when the froth arising was allowed to remain for some time. If after two or three days no effect was produced by this, the skin covering the pockets was cut through at once. At first I strove against this method of treatment, as I could not bring myself to enlarge the so-slowly healing wound. But you would be surprised how quickly everything healed after radical removal of all dead tissues with a possibility of healthy secretions and free entrance to all remedial agents. In the period between the bath and the night the arg. nit.-Peruvian balsam ointment was applied in the manner above described to the parts affected.

There were, it is true, also cases in which this treatment failed to act, where in the morning the ulcer was full of secretion and dead products. Here the sound cleared the matter up. If the whole of the border round the ulcer was carefully explored, you would be surprised to find the sound suddenly sink into a depth of some centimetres, whilst the skin above appeared to be completely intact. In one case I could follow the ulcer from the prominent part of the sacrum up to the commencement of the lumbar vertebræ. Sometimes we find several such passages. Tamponade with the most varied material, iodoform gauze, peroxyd of hydrogen, gauze steeped in sublimate, with arg. nit.-Peruvian balsam ointment, powder of arg. nit. (arg. nit. Bal. alb. equal parts) had no effect. It was but with a heavy heart that I at last decided to split up the whole track on the grooved sound. The result as it was with the skin pockets was surprisingly good, and in such cases since then I have split up these passages at once, regardless of their length, and always with a prompt result. When there are several such passages the slitting of the longest is generally sufficient. More lately in every case of decubitus I have examined with the sound most carefully, and strongly recommend the precautionary measure. Many non-healing bedsores are cleared up by this procedure.

I should here not omit to mention one disadvantage in wood wool, already pointed out by Sander, noticeable especially when nurses are rather rough or patients impatiently restless, and that is the not inconsiderable quantity of dust. In spite of every care, and when every precaution has been taken, this cannot be altogether prevented. Generally speaking, this should not prevent the use of the wood wool, as during the years it has been in use with us there has been no case of injury to the mucous surfaces either on the part of patients or nurses, and the manufacturers of the material, in answer to a question put to them, said that some of the workpeople had been employed on the same work for tens of years and without the least injury to health. Matters are quite different, however, in cases of infectious diseases of the intestines. Here the possibility must be considered that the bacilli of the disease may be spread through the dust on to food, and one must consider that the bacilli of typhoid are very resistant to drying. These considerations led us last year in the face of a small epidemic to the use of peat moss in place of wood wool. This substance is also for many reasons very suitable as bedding for unclean patients. In my opinion, however, apart from such times, wood wool is the more suitable of the two. Moreover, the firm make also wood wool lint tissue and gauze, which are less dusty than the wood wool itself. But I have no experience with the latter-named articles.

On the other hand, it would be unjust to condemn its use in epidemics of typhoid without mentioning that it possibly has advantages in combating such a disease when used as a vehicle for conveying away infectious evacuations. Sanders has already pointed this out. It is not to be doubted that the soaking up of diarrhœic stools will be a hindrance to the spread of such diseases. The impregnating with sublimate will also play a part. It speaks for a favourable action on the part of wood wool that in earlier years some epidemics of typhoid appeared in the female division of the infirmary, that the disease, in spite of the large number of marantic individuals, was limited to one ward, and that, according to the reports, no great harm resulted from the outbreak, and that it was easily suppressed. As regards these points, it was possible that the exchange of moss for wood wool made it more difficult to come to a determination. Perhaps a bacteriological investigation as to the employment of wood wool in infectious diseases of the intestines would clear up the point.

Conclusions.—From a prophylactic point of view, it is important to place cases of decubitus in wood wool, that it must be regularly kept clean and soft; further, the parts must be washed daily with vinegar and water, and, for therapeutical purposes, camomile baths must be made use of along with zinc ointment. In severe cases the parts must be treated with an ointment of silver nitrate and Peruvian balsam, the necrotic parts must be steadily taken away, and passages as steadily opened up. Examination with the sound is specially important. In this way, apart from other tissue changes, every bedsore may be made to heal up in a comparatively short time.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by M. Castaigne, M.D., Professor at the Faculty of Medicine of Paris; Physician to the Beaujon Hospital. Subject: "Digestive Uræmia Simulating Cancer of the Pylorus."*

The Council of the Royal College of Surgeons has decided to place a bust of the late Lord Lister in the College, and to ask Sir Thomas Brock, R.A., to undertake the execution of the work.

ORIGINAL PAPERS.

THE FUTURE OF THE MEDICAL PROFESSION. (a)

By Sir JAMES BARR, M.D., LL.D., F.R.S.E.,
Consulting Physician, Liverpool Royal Infirmary.

Ladies and Gentlemen,—When I was considering what subject I should choose for my presidential address, I chanced to read the Huxley lecture on Life and Conscioucness by Henri Bergson. He there asks the questions: "What are we? What are we doing here? Whence do we come and whither do we go?" Without following Bergson's philosophic disquisition as to how life and consciousness permeate matter, and as to how they were started on their evolutional career by an original impetus, it occurred to me that these questions might be very appropriately asked of the medical profession. What are we? Can we show any sufficient *raison d'etre* for our existence? Are we of sufficient value to individuals and to the State to justify our continued existence as a profession? Is the world any happier for our presence? Are we really an advantage to the higher evolution of the race? Natural evolution, and the evolution of the art and science of medicine run on different lines; they are often mutually opposed except when Nature gets the upper hand, and medical men are blindly following their ideas of natural laws. Nature is lavish in the production of life and prodigal in its destruction; her efforts are directed to the improvement and perfection of the species, she cares nothing for the individuals except to adapt them to the environment. This process of adaptation spells elimination for the unfit, and thus we get the survival of those best suited for their surroundings, and these in their turn produce a vigorous, intellectual, and self-reliant race. Medicine, on the other hand, has been evolved for the benefit of individuals. It does not deal with the unborn, but merely devotes attention to the living. We not infrequently hear such exclamations as "What has posterity done for us? Why should we consider the future of the race? It is sufficient for us to look after our own progeny who have already arrived in this world." It seems sufficient for a good many people to know that they have descended from William the Conqueror, or from some of his mighty men of valour whose virile power they have not yet quite succeeded in dissipating. They are not very particular as to the purity of the germ-plasm which they are handing on to succeeding generations.

Medicine and Race-Culture.

Medical men are ever more or less successfully adapting the environment to the individual, and giving the weakling an equal chance of survival with the strong; in fact, often a much better chance not only of surviving, but of multiplying, because the strong and virile have to take all the risks, not only in supporting themselves, but also in maintaining the decadent. We have successfully interfered with the selective death-rate which Nature employed in eliminating the unfit; but, on the other hand, we have made no serious attempt to establish a selective birth-rate so as to prevent the race being carried on by the least worthy citizens. The same maudlin sentimentality which often pervades the public not infrequently affects the medical profession. We have often joined forces with self-constituted moralists in denouncing the falling birth-rate, and have called out for quantity regardless of quality. We readily forget that utility, as long ago pointed out by John Stuart Mill, lies at the basis of all morality. We feel compelled by the dictates of conscience to preserve, as far as possible, every human being, no matter how imperfect his intellectual and physical development. Sickness and distress make all flesh akin, but our object should be to prevent such maladies rather than to imagine that they have been sent by Providence.

We have often assumed the position of guides, philosophers, and friends, but in the main we are individuals who deal with the prevention and treatment of disease, and, to some extent, with the maintenance of health. That is what we are doing, and what we shall continue to do for time immemorial if some of our ignorant legislators, who know nothing and care less about physiological laws, have their way. There are a great many people who think that they can have sixpennyworth of health by the purchase of a bottle of physic. Even the British Government health restorer is at a serious discount, as we are led to believe that ninepennyworth of that refreshing fruit can be had for fourpence. Those who put such a low estimate on the position of the medical profession are very apt to grumble when they discover that the health which they have ruthlessly dissipated often cannot be recovered for money. Notwithstanding the gross ignorance which is rampant in our Legisature, and the failure of many to perceive the future from the past, there is yet a growing consciousness among the more intellectual members of the community that the present state of matters must not be allowed to continue. We must raise up a vigorous, intelligent, enterprising, self-reliant, and healthy race.

The True Eugenics.

We must not rest content with the mere treatment of disease; we must instil into the public mind intellectual and physical health. We must continue to deal with the prevention and treatment of disease, but we must also ascend to a higher platform and raise the banner of health with the fervour of a new religion.

We must begin with the unborn. The race must be renewed from the mentally and physically fit; the moral and physical degenerates should not be allowed to take any part in adding to the race, Above all, we must breed for intelligence. The laws of heredity should be widely taught, so that those with hereditary blemishes may consider their moral responsibility in bringing children into the world. If everyone would consider his moral responsibility to the race rather than his own selfish gratification, in a very few generations we might produce a pure, moral, highly intellectual and healthy race. Of course we could not make all equal—there is no such thing in Nature, and never can and never will be, and it is not desirable that such should be—but we could raise the average plane and get rid of the present decadence. I know that in the expression of these views I am coming into direct conflict with at least some of the Churches, of which there are almost as many varieties as there are human beings. The majority preach in favour of quantity rather than quality; they advocate a high birth-rate, regardless of the consequences, and boldly tell you that it is better to be born an imbecile than not to be born at all. They forget the saying of Jesus of Nazareth that it would have been well for this man if he had never been born. With the man-made morality of the Church I can neither art nor part. There must be a high racial morality based on utility and the greatest happiness not merely of the individual but of the race. Medical men, when they are consulted, as they often are, on questions of matrimony and reproduction, incur a very serious responsibility when they encourage the mating of mental and physical weaklings. It is their duty not to pander to the selfish gratification of the individual, but to point out to every one his positive and negative duties to the race. The time is now ripe for dealing with mental weaklings, and they will be effectually dealt with in all progressive nations. The consciousness of the intellectual in all grades of society is being awakened to the responsibility of individuals to their offsprings, and the advanced thought of the intelligent portion of the community will demand something more than treatment from the medical profession. This will place physiology on a higher plane than pathology, and will require an even more advanced study of the laws of health than of the tendencies to degradation and disease.

(a) Abstract of Presidential Address delivered at the Eightieth Annual Meeting of the British Medical Association, July 23rd, 1912.

Leaders of Progress.

The work of Lord Lister, who was a great physiologist, emancipated surgery from the thraldom of tradition, and the great advances which have consequently taken place in that branch of our profession have been the marvel of the age. The progress of medicine during the same period, though noteworthy, has not been so startling. Unfortunately the progress of medicine has been stifled by tradition and by a succession of more or less reputable old gentlemen, who, having attained to place and power by accidental circumstances rather than merit, have not seen the necessity for change. There have been, however, many insurgents who have disregarded the trammels of tradition and led the van of progress. The brilliant advances of surgery were rendered possible by the exclusion of pathogenic organisms, by an improvement in the environment; but such methods are not always possible in internal medicine. We must not only pay attention to the environment, but we must raise the defensive forces of the individual, increase his inherent powers of resistance, and, as far as possible, render him immune to disease. We can point to the remarkable work of Edward Jenner in protecting the individual against smallpox, the work of Pasteur on hydrophobia, of Koch on tuberculosis, and more recently the epoch-making work of a Liverpool man, Sir Almroth Wright, on the prevention and treatment of many infectious diseases. Some of the greatest advances in modern times have been with regard to the prevention and treatment of infectious diseases, and as prevention is generally looked upon as more important than cure, the part played by medical officers of health must become more prominent. The improvements which they have effected in sanitation and in the segregation of disease have been of great advantage to individuals, but it is very doubtful whether their efforts have been equally beneficial to the race. They have largely succeeded in abolishing cholera, typhus, and typhoid fever by getting rid of the sources of infection and thus limiting the incidence of these diseases, but they have in no way added to the immunity of the race or lessened the susceptibility of the individual. With measles, scarlet fever, and whooping cough and influenza there has been less success, but from the general experience of those diseases by our race it seems that Nature has gradually established a use-acquirement, and consequently the virulence and fatality of these diseases is becoming much less. Notwithstanding all sanitary improvements, the incidence of diphtheria has actually increased, but by antitoxic treatment the fatality has been greatly lessened. If we could only abolish the tubercle bacillus in these islands we could get rid of tuberculous disease, but we should at the same time raise up a race peculiarly susceptible to this infection—a race of hothouse plants which would not flourish in any other environment.

Genius and Nervous Troubles.

The idea that insanity and genius are closely allied has still so strong a hold on the public mind that many would not interfere with the insane in the hope that some day they may breed a genius. Those who adhere to this ancient and in the main ill-founded belief do not know what constitutes a genius; they ignorantly mistake eccentricity, or uncontrolled and ill-regulated mental activities, for genius. There is not much danger of intellectual visionaries being disturbed in the present day; there are many of them at large, and more knaves than fools among those who batten on an ignorant and trusting public. The higher the intellectual evolution the greater the number of geniuses that are likely to be produced. There must be inherited innate qualities capable of development; a favourable environment will contribute to such development, but it can never create a genius. You cannot gather grapes from thorns nor figs from thistles. The feeble-minded individuals are a growing incubus on the nation, and should be dealt with in the most humane manner by their sterilisation or segregation. It is for the nation to decide which method shall be adopted, but the latter will comport best with the general feeling of the community. There are some who contend that an increase of the celibate population would be a menace to society, but a society which could not cope with such a feeble menace would scarcely be worthy of existence. Moreover, what about the enormous numbers of women, and of men to a less extent, who are forced to live lives of celibacy by the present artificial state of society. Most of the hereditary nervous diseases could be eliminated and the numerous neuroses could be checked by removing many of the causes that favour their development, and by encouraging the reproduction of the race by individuals with stable nervous systems. For the normal activities of the mental attributes you must undoubtedly have a healthy and properly nourished nervous system. It not infrequently happens that men with brilliant intellects may also have inherited or acquired physical defects, and their will power may be able to control and direct the operations of the mind, but it is within the experience of most intelligent individuals that the best mental work is accomplished when in sound health.

The Path of Progress.

We have come from Hippocrates onwards with a long tradition of healing, much of which the public has taken in good faith, and usually in blessed ignorance, but whither do we go? My friend Professor Benjamin Moore would say the Dawn of the Health Age is upon us, but I trust the dawn and the noonday of the future will be much brighter than any picture which he has portrayed. We do not want a race of gently-reared hot-house plants, which his system would imply. We want a race of men. We want to uphold the saying of Disraeli that " Man is not the creature of circumstances; circumstances are the creatures of man. We are free agents, and man is more powerful than matter." We wish to say with Emerson: " Life must be lived on a higher plane—we must go up to a higher platform, to which we are always invited to ascend; there the whole aspect of things changes."

The profession that has made the greatest strides during the past half-century has been engineering, with its allied sciences of physics and mathematics, yet the medical profession has to deal with a much finer piece of mechanism than anything which has ever been constructed by the hands of man. Moreover, we have got the advantage over the engineer, in that our machine is a very durable, self-regulating, and self-repairing automaton—a machine in the construction of which, fortunately, we have had no say. All we have got to do is to study its mechanism and its functions, to regulate the works, preserve their autonomy, and prevent their destruction. On the other hand, a learned member of our profession has recently extolled our labours, and pointed out our difficulties by showing that the works of the human body are covered up, the hatchways battened down, and yet we are expected to find out and set right any defect in the internal machinery. This form of argument would be apropos if our eyesight was the only sense which we possessed, but the physiology of the body is fairly well understood, and methods of arriving at a correct solution of most problems are at hand; the difficulties are in the application of the knowledge which we possess. We cannot too strongly insist on the higher teaching of physiology, but this necessity is not yet generally recognised even by the General Medical Council.

The path of progress which I have tried to point out will in the future devolve on such great associations as the British Medical—associations which have got no selfish interests to serve, but which have only the honour and dignity of the medical profession and the welfare of the public at heart. We often hear such bold statements as that the general medical practitioner is doomed, his occupation has gone, and his livelihood has vanished. Those who thus talk have their heaven *in statu quo*—they think there is no blessedness beyond the maintenance of their own ignorance. In my opinion the future of medicine will rest with enlightened and highly-educated general practitioners—men who will look after the health of the community, who will see that mechanism of a high order is produced, and who will see that the machinery of the individual is properly lubricated and not subjected to any unnecessary friction or strain. The enlightened public will look to their medical attendants as guides, philosophers, and friends, both in health and disease.

As has been long advocated by the British Medical Association, we must have a properly-regulated State examination, and the vested interests of corporations must not be allowed to prevail against the public weal. Mere examining corporations, which have done practically nothing for medical education, and are chiefly engaged in extracting fees from students, should be allowed to retire into obscurity. There is here plenty of good work for an able statesman—a man determined to lead and to prevent the piesent policy of drift. The work of the medical profession should be such as to attract the brightest youths in the country. We must recognise that the outlook of the medical profession, though at present somewhat dismal, is merely a transition stage, which will soon pass away. The sands of time may be running down, but we hope to invert the hour-glass, and trust that there may be a grand to-morrow and a bright hereafter.

" Whatsoever thine hand findeth to do, do it with all thy might; for there is no work, nor device, nor knowledge, nor wisdom, in the grave, whither thou goest."

THE RELATIONS OF THE CIRCULATION. (a)

BY G. A. GIBSON, M.D., D.Sc., F.R.C.P.

Physician to the Edinburgh Royal Infirmary.

THE part played by the circulation in the integration of the organism is a natural subject for our thoughts in this city, where the author of the fascinating Silliman Lectures presides over the domain of physiology. The subject must be admitted to be a very large one, as it does not only include the consideration of the connections of the central and the peripheral portions of the cardio-vascular system, but, as already suggested, the relations of the circulation as a whole to the body at large. It comprises the nature of the actions and reactions continually in operation, and the character of the stimuli and responses likewise constantly at work.

The circulation in all the higher animals may be regarded as based upon, or concerned with, four primary groups of principles. It is based upon mechanical arrangements which form the foundation for all its operations. It requires chemical changes, by which it is maintained, and for which it provides possibilities, by transference of matter. It is modified by glandular secretions, which profoundly alter its mechanism and chemical processes. It is affected by nervous agencies which deeply influence the performance of its functions.

Many stages of being in the evolution of the mammal are analogous to phases of life in the development of its individual representatives. The analogies involve structure as well as function. In the newly born there is not merely disproportion in the size of different parts and organs as compared with the adult, but there is also difference as regards function. It would serve no useful purpose on this occasion to dwell particularly on the infantile divergences from the normal of adult life as regards size and weight; but it is of importance to linger over certain deviations in function. The heart of the baby, in relation to the weight of its body, is considerably larger—expressed in percentages of total weight it is almost 0.9, as compared with a little over 0.5 in the adult—almost double; even more striking is the fact that the frequency of the heart beat is much greater, being from 130 to 140 per minute—roughly speaking double that of the adult; the whole circuit of the blood is therefore traversed in a much shorter time—rather more than one-half. It therefore follows that the blood is renewed in the tissues of the baby with greater rapidity than in the adult. The total amount of blood, as compared with body weight, is considerably larger in the baby than in the adult; and as the respiratory work, although increasing absolutely with the growth of the body, is nevertheless relatively greater in early life, the absorption of oxygen is much more active than the production of carbonic acid. Metabolism, as the result, is extremely active within a few days of birth.

(a) Abstract of the Address in Medicine delivered at the Eightieth Annual Meeting of the British Medical Association, July, 1912.

The Glandular Mechanism.

Let me carry you now in thought, before entering upon the glandular mechanism, to some examples of the wonderful nervous influences which preside over the heart and vessels, linking them up with the rest of the body. The whole life of an animal, according to Starling, "may be looked upon as a series of reflex actions." Nowhere is this more obvious than in the relations existing between the nervous and the circulatory apparatus. Of this fact a few simple illustrations may be cited. The idea of profound disorders of circulatory relations through vasomotor disturbances has been gradually growing up since the discovery of the nervous connections controlling the circulation. The observations of Landois on the reflex origin of anginous pain, and of Nothnagel on its connection with vasomotor contraction, as well as the more recent work of Pal on vascular crises, furnish sufficient evidence of this proposition. The receptive field, as Sherrington shows, presents a remarkable contrast between the afferent tracts of the somatic and splanchnic realms; there is a wonderful richness in receptors of the former, or exteroceptive, as compared with the remarkable poverty of the latter, or interoceptive field. Mackenzie and Head have taught us how splanchnic impulses reaching the receptive and perceptive centres are referred by them, as the result of their development, to the somatic area. Nowhere is this truth more clearly manifested than in the various degrees of cardiac pain.

Since the early researches of our countryman, Lower, into the nature and cause of dropsy, the matter has been the preoccupation of many an anxious inquirer. One of the first steps in our modern knowledge of this important subject was the discovery by Ranvier that stasis in a limb is followed much more certainly and much more quickly by œdema if the nervous influence of the part be withdrawn. The close association of œdema and glossiness of the skin with neuritis is now universally known, and is of analogous nature. One of the most important contributions within recent years is that of Ninian Bruce, who has shown that the initial dilatation of the vessels in the early stages of inflammation depends upon the influence of the local nerves, and that it probably is of the nature of an axon reflex.

If we desire an instance in which to find an example of the intimate connection between circulatory and glandular changes, we have not far to seek—it is always to our hand in Graves's disease. Just as in the case of glycosuria, we find hereditary, neurotic, and traumatic factors at work; its invariable association with glandular and circulatory changes, moreover, has long been known. In exophthalmic goître there are symptoms connected with the digestive system due to catarrhal and hyperæmic conditions; of the glandular system in thyroid enlargement, and less frequent alterations in the thymus, the pituitary, the suprarenal, and the lymphatic glands, as well as the spleen; the blood often reveals the presence of anæmia and, less commonly, of cyanosis, while varying degrees and types of leucocytosis are not infrequently encountered; the circulation does not merely reveal the presence of increased frequency of pulse-rate, but of very varying degrees of arterial pressure, while the heart may manifest considerable dilatation, with or without hypertrophy; the renal conditions may be largely modified, not only by the existence of polyuria, but of albuminuria or of glycosuria; the integumentary system may be the seat of the most multiform rashes, and also of atrophic changes particularly affecting the cutaneous appendages; in the nervous system are to be found remarkable divergencies from normal conditions—sensibility diminished, perverted, or increased motility usually affected in the direction of irritable weakness, with exaggeration of the reflexes and responses, diminution of muscular energy, shown by weakness of the movements and tremulousness of the muscles and disturbances of the delicate processes of co-ordination especially as regards the eye, vasomotor and visceral changes, and, above all, profound alterations in the higher cerebral functions—such are the outstanding features of the affection.

The Internal Secretions and the Circulation.

All organs—in fact, all tissues—receive from the blood certain substances, and yield in return others. Every function of the body, even a simple muscular contraction, furnishes material which is restored to the blood; much of this, however, is of the nature of waste. The glands produce special substances, to which alone the name of secretion can be properly applied. All of these glands are now assumed to yield an internal secretion; many, in addition, also furnish an external secretion. The effects of suprarenal and pituitary extracts in the blood vessels have been studied by Argyll Campbell, who found that suprarenal extract causes marked constriction of all the organs, with the exception of those of the heart and lungs. In the heart it produced slight constriction, and this was more evident in the case of the lungs. Pituitary extract contains at least two substances—one causing contraction, and the other relaxation. Each is capable of producing its characteristic effect on all the arteries, except the renal, where contraction is hardly ever obtained, the result being almost always relaxation.

The function of the intermediate part of the pituitary body is to produce a "colloid" material which contains active principles or hormones acting upon the heart, blood vessels, and kidneys. Probably there are several such hormones acting upon blood vessels and kidneys independently, and also acting antagonistically, so that, according to circumstances, either a rise or fall of blood pressure, an increase or diminished secretion of urine, may be produced, and the effects on the kidney may be independent of those on the blood vessels. The hormones which appear to be most active are those which produce contraction of the blood vessels in general, with dilatation of the renal vessels and increased activity of renal cells, but there appear to be others which cause constriction of renal vessels and diminished activity of renal cells: the effects of these latter are generally less lasting. There is also usually an inhibitory effect produced on the heart.

The Role of the Sympathetic Nervous System.

When we consider some of the arrangements by which the sympathetic system is linked up with the cerebro-spinal axis, we can understand how profoundly the central nervous system may be affected by impulses from the periphery, and how reciprocal influences are exerted. Let me mention that the grey rami communicantes appear from experimental work to be composed of fibres which take their origin in the vertebral ganglia of the sympathetic, and that these rami probably carry vasomotor impulses to the blood vessels of the cord; we can grasp the profound significance of the connection. The fibres of the grey rami seem, indeed, to be relay fibres on the outgoing vasomotor path, recurving backwards and carrying impulses to the vascular supply of the central nervous system. They are, therefore, recurrent, like the fibres described by Magendie as re-curving and re-entering the cord with the anterior roots in order to supply the membranes of the cord with sensibility. Langley and Sherrington consider the fibres of the grey rami entirely post-ganglionic—that is, different from sympathetic ganglia, but intended for distribution to the cord vessels.

A paper of the greatest interest was that recently published by Elliott, who has found that profound nervous influences, such as fright, produce very definite changes in suprarenal secretion. He is led to believe that the suprarenal glands are played upon by the splanchnic nerves in emotional reflexes with delicate adjustment.

Ever since the observations of Oliver and Schäfer upon the suprarenal glands, their substance has been employed by me as the most important remedy in the treatment of Graves's disease. Various mineral and vegetable substances have, in the past, been administered freely in this disease, and in more recent times the blood of dethyroidised goats has been largely used. This latter substance has in my hands, as in those of Murray, proved to be of about the same value as the *pulvis Olympicus* poured upon us by a racing car on a summer day. But in suprarenal extract we have an agent which may be stated fearlessly to have no rival in the management of this affection. Under its employment the rate of the pulse is reduced, the protrusion of the eyeballs disappears, the thyroid gland diminishes, the tremor, along with every other nervous symptom, vanishes, and the patient is restored to health in a way that we never see under any other method of treatment. No one who knows me will accuse me of aught but the most sympathetic attitude towards modern surgery; but this is one of the affections in which it is my duty solemnly to protest against the *furor operativus* which, in this condition, is in the overwhelming proportion of cases absolutely unjustifiable. It is surely far more scientific, as it is certainly much more successful, to trust to the chemical messenger, or hormone, which has the power of regulating the glandular activity responsible for so much of the clinical picture in Graves's disease, than to risk doubtful surgical adventures.

A Hope for the Future.

We have to put to ourselves the important question, How do these powerful agents produce the changes we have traced? We have seen that they act upon many, perhaps all, tissues. Some probably act on the local processes of renewal and removal, and others by their effects on the muscular wall of the vessels; certain undoubtedly act on the tissues, not directly or even by modifying the vessels, but through the sympathetic system. It seems probable that they invoke nervous influences, consisting in waves of molecular disturbance, which brings about changes by liberation or inhibition. The recent work of Elliott, previously referred to, supports this view.

The results of these interesting advances must enhance our hopes of even more valuable additions to our knowledge, theoretical and practical, at a date not far distant. Their consideration opens a vista of infinite possibilities in the explanation of normal functions, the comprehension of morbid processes, and the management of diseased conditions. We are still groping after solid facts in the dusky twilight of the dawn, but we doubt not that the brighter radiance of the day will reveal much that is now hidden from our eyes. All that we can now know, all that we can now do, is the result of modern methods of investigation. Led by the whole trend of our education to set a high value on all honest work that explains the scientific problems and assists the practical treatment of disease, the results obtained by devotion to the three sister studies—physiology, pathology, and pharmacology—are to us of paramount importance. It is not given to us all in equal measure to contribute to the advance of knowledge; we, as clinicians, gladly avail ourselves of the labours of those devoted men who illuminate many vexed questions by their experimental researches.

We are like children on a beach of shifting sands: successive tides mould the form of the shore, gradually washing away, but as steadily building up, the coast of the future. So it is with ourselves: with the constant movement of thought, and the alternate advance and retreat of opinion, there are incessant changes. Contemplating these fluctuations, we are sometimes inclined to be impatient, and to wonder whether, after all, there is a real constructive movement.

SOME MEDICAL ASPECTS OF EUGENICS. (*a*)

By A. F. TREDGOLD, L.R.C.P.Lond., M.R.C.S.Eng.

Introductory.

Gentlemen,—I cannot but be conscious that some explanation, if not apology, is required of me for the choice of my subject this afternoon. For the purpose of this clinic is to afford the opportunity of dealing with matters of importance to us as medical practitioners, and it may well be thought that, although eugenics may be of interest, it can hardly have sufficient practical value to merit inclusion in a post-graduate course.

But I venture to think that such a view is erroneous. Apart from the fact that eugenics has now become a prominent subject of conversation and discussion—and on that ground alone is one which it is eminently desirable for us to have a knowledge of—it is also a science which presents some very important medical problems, problems which are already beginning to engage the attention of the physician and surgeon, and which, in the not distant future, must inevitably come to do so to a still greater extent. We cannot ignore the fact that a great change has taken place in our professional outlook during the past half-century. Whilst by no means neglecting its cure, the trend of medicine is becoming increasingly directed towards the prevention of disease. Eugenics is simply a further extension of this tendency; it is, in fact, preventive medicine carried to its logical conclusion.

This position of eugenics is rapidly receiving recognition. Quite recently a chair in this science has been established in the University of London, and indications are not wanting that other Universities may eventually follow suit. Indeed, I would venture to hazard the opinion that the time will come when eugenics will be a recognised subject of the medical curriculum.

Unfortunately, there is still considerable misunderstanding as to the principles and scope of this science. It therefore seems advisable that I should first of all give some brief account of what eugenics really is and what it proposes to do; we shall then be in a better position to see how intimately it is related to the science of medicine.

(*a*) Delivered at the Medical Graduates' College and Polyclinic March 6th, 1912.

VARIATION AND SELECTION.—THE OBJECT OF EUGENICS.

I assume there are two statements with which we shall all agree; *firstly,* that evolution has occurred, and, *secondly,* that further evolution, particularly the racial advance of man, is still possible. I do not think that any well-educated person will nowadays be found to dispute the first statement. With regard to the second, it is, to my mind, inconceivable that all the stupendous progress of the past, resulting, as it has done, in the evolution of man from a single-celled organism of microscopic size and denoting a capacity for development which appears to be almost unlimited, should find its culmination in man as he at present exists, with, as we well know, all his manifold imperfections of body and mind. Indeed, that the limit has not been reached is fully demonstrated by the occurrence from time to time of such persons as Newton, Darwin, Kelvin, Lister, who tower, in their mental development, so conspicuously above the heads of the mass of mankind.

I assume we shall further be agreed that this evolution has resulted from two causes—namely, variation and natural selection. Of the precise details of the process, the *modus operandi,* we may still be imperfectly aware; but that variation and selection are fundamental to all past evolution we cannot doubt, and equally we cannot doubt that they will condition all future advance.

Variation, as I need hardly remind you, is the term used to denote those differences existing between individuals of the same species which are of germinal origin. Many individual differences are not inborn, but are acquired; they result from the action of the environment, in which term I include all the external psychical and physical forces operating upon the organism from the moment of conception; changes of this kind are called modifications. The essential characteristic of germinal variations is their transmissibility to a subsequent generation, on the other hand it seems probable that most modifications are not so transmissible.

It is probable that many of these variations are so slight that their effect upon the condition of the individual is quite insignificant. In other instances, however, they are much more pronounced, and they then result in one of two things. The individual is either placed at a greater advantage in the struggle for existence and is consequently better able to survive, or else he is so seriously handicapped that he is rapidly eliminated by the process of natural selection. The generally accepted view at the present day is that it is in consequence of major "discontinuous" variations of this kind, rather than of minor "continuous" variations, that evolution has taken place in the lower life forms.

The qualities which favour survival in man are different from those operating in the lower animals; but there can be no question that his progress has been similarly due to the survival of the fit and the elimination of the unfit. Much of the selection has been a natural one, but it seems probable that even at an early stage of human development nature was assisted by man himself. Certainly we find that even to-day there are many savage and barbarous races who systematically destroy diseased or deformed offspring. The same practice was enforced by the ancient Greeks and Romans for the good of the community, and Plato, in the Fifth Book of his Republic, advocates it as a necessity for the ideal community.

Since those times, however, a great change has taken place. The growth of humanitarian sentiment has caused the life of the individual to be regarded as far more sacred, and has even made it of more concern than the life of the nation. Not only has judicial infanticide been abolished, but every effort is now made to prolong the life of the diseased and defective. These conditions are, in a large proportion of instances, of germinal origin and transmissible, and consequently the number of these defective persons in the community has increased by leaps and bounds. Natural selection has been interfered with, and no other form of selection has been devised to take its place. The net result is that human evolution has been arrested, the race is at a standstill, and the history of mankind is simply one long record of the birth, growth, decay, and often extinction of nation after nation.

It is the object of the science of eugenics to remedy this by two methods. *Firstly,* by replacing natural selection by birth selection; in other words, by encouraging the propagation of sound, healthy and "fit" germinal variations, and restricting that of the diseased and "unfit." *Secondly,* by ascertaining the causes of, and adopting measures to prevent, unfit germinal variations in the future.

Now, it is impossible to deny that the science of medicine has played a very prominent part in bringing about the survival of the unfit. The ability of medicine and surgery to save life is now very great, and every day we are engaged in bringing to bear all our knowledge, skill and attention to snatch from the jaws of death lives which we know to be fraught with great expense or even danger to the State, and still greater expense and menace to posterity.

It is true that in the past we have acted in ignorance of these dangers. It is only comparatively recently that we have become aware how the propagation of the unfit, associated as it is with a serious decline in the birth-rate of the fit, is seriously threatening racial progress; but now that our eyes are opened to the fact, it is clearly incumbent upon us to review our position, and the first question I wish to consider is the general attitude of medicine and of the medical practitioner to the survival of the degenerate.

MEDICINE AND THE SURVIVAL OF THE UNFIT.

Regarding this, it seems to me quite clear that the fundamental principle of medicine must be the conservation of life. The value of the life saved, whether much or little, whether a source of good or of evil, is no concern of medicine or of the medical practitioner; these are matters for the community and entirely outside our province. I consider that any relaxation of this cardinal principle would not only be a degradation of our calling and a betrayal of our trust, but that it would also react to the grave detriment of society, and probably be productive of even more evil than that which it proposed to remedy.

It cannot be denied that there are many diseased and degenerate specimens of mankind whose continued existence is a source of grave anxiety and distress to their relatives, of suffering to themselves, and of menace to the well-being of the community. But if the doctrine of euthanasia were once admitted, it would be exceedingly difficult to know where to draw the line; the possibilities of abuse would be enormous, and the arrogation of the right by the individual practitioner, or even by a board of practitioners, to decide whether a patient should or should not be allowed to live could not fail to degrade our profession, to destroy the confidence which is so necessary between the physician and his patient, and to result in the refusal to call in our aid. All this would be to the ultimate disadvantage of society. It is, of course, unfortunate for the racial progress of man that the science of medicine should have contributed so largely to the prolongation of the lives of the admittedly unfit. But this is all the more to the honour of medicine, for it is our fundamental aim to save life. The evil arises not so much from the survival, but from the propagation of the unfit, and this is the concern of the State. It is social science which lags behind and which has failed to keep abreast of the advances of medicine. It is the duty of the State to devise means whereby the injurious effects necessarily attending many phases in civilisation should be remedied. It is not medicine, but those responsible for the management and safety of the nation, who must bear the blame. I cannot but feel that the attitude of eugenics is much misunderstood on this point, and I have therefore thought it advisable to state my firm conviction as a medical man and yet a convinced eugenist.

Although, therefore, in my opinion, we are not justified in allowing any considerations regarding the good of posterity to interfere with this fundamental duty of the conservation of the lives entrusted to our care, but must leave the general well-being of society and posterity to be looked after by the State yet it is evident that we cannot ignore these wider issues. Our profession is rightly regarded as the custodian of the public health; it is concerned with the prevention as well as with the cure of disease, with the future as well as the present, and I cannot but think that it would rightly be held to be guilty of a grave dereliction of duty if, knowing that certain present conditions were seriously threatening the future good of the State, it failed to raise its voice in protest or to indicate the means by which future disaster might be averted.

It is the duty of the science of medicine to draw attention to the evils attaching to the propagation of the hereditarily diseased; it is the duty of the State to take means which will obviate those evils. But I hold that each individual medical man has a similar duty to the patients in his care. No practitioner would neglect to forbid marriage to a patient whom he knew to be suffering from syphilis; I think it is equally his duty to advise against the marriage of a person whom he has good reason for thinking will produce diseased or degenerate offspring.

At the present time it is not always necessary for us to take the initiative in this matter. Many of our educated and more enlightened patients are fully alive to its importance. They are already appealing to us for advice as to their fitness to undertake the responsibilities of parenthood, and it is plainly our duty to be prepared to give them this advice. I regard this as a matter which is peculiarly within the province of the family physician, and one upon which his opinion will be increasingly sought in the future, and this brings me to the next medical aspect of eugenics—namely :—

Advice Regarding Marriage.

The decision as to whether, on eugenic grounds, a person should or should not be advised to marry is always a responsible and often a difficult one to arrive at. A strong attachment may have been formed which is not easily broken. In any case, it is a serious matter to condemn a young man or woman to a condition of lifelong celibacy, and we have to remember that persons who would be willing to abide by an adverse verdict evince thereby a nobility of motive and determination of character which may even to some extent compensate for hereditary taint. Such a decision requires a considerable knowledge of the laws of heredity, and of the facts regarding the transmission of diseases; our knowledge on these points is far from perfect. It necessitates a very careful study of the family history, and such data are often incomplete. It is obvious that the matter is full of difficulties, and the most I can attempt to do in the time at my disposal is to indicate some of the chief considerations upon which such a decision must be based.

On the whole, the available evidence points to the conclusion that the minor modifications which are produced upon the body by the environment are not transmissible; transmission only occurs in the case of germinal changes. Now, diseases are of two kinds; firstly, those which are exogenous, or due to the environment, of which the best examples are the infectious and contagious group; secondly, those which are endogenous, or the result of an innate tendency or diathesis, such, for instance, as hæmophilia and most cases of insanity. Strictly speaking, this distinction is not quite accurate, for reasons into which I need not here enter; it is sufficiently precise for our present purpose. It is obvious that it is only the marriage of those suffering from the latter—the germinal group—which should be prohibited.

It does not follow, however, that every individual who is the victim of some hereditary tendency to disease should on that account be precluded from marriage. Heredity plays a much more important part in the causation of disease, even in those of the exogenous group, than is generally recognised. There are few of us in whom all the organs and tissues are of equal durability; in most the body is liable, as a result of hereditary predisposition, to break down sooner in one system than in another; and if the mere presence of some hereditary tendency were to be admitted as a ban, I am afraid there would be a very alarming decline in the marriage rate. Take, as an instance, gout; its hereditary nature is well known, but the descendants of even pronounced gouty families are numbered amongst the ablest members of the community, and the actual development of the disease can often be avoided by a healthy mode of life. The descendant of a gouty stock should be advised against marriage with a person similarly tainted, but to bar his marriage absolutely would be absurd, and many other examples of this kind will readily occur to us. It is only when the tendency is of such a nature as to result in serious disablement, to interfere with the discharge of social duties and responsibilities, and to produce civic unfitness that it constitutes a bar to propagation.

I think the best example of innate defect of this latter kind is afforded by the neuropathic or psychopathic diathesis. This arises from the fact that there is probably no other class of disease which has been so clearly proved to be hereditary, and there is certainly no other group which is liable to be attended with such disastrous consequences to the individual sufferer and to the community. This diathesis is probably the manifestation of a devitalisation of the neurone determinant in the germ plasm, and the significance of such a germinal defect is apparent when we remember that the nervous system has come in man to occupy the seat of organic government, that its integrity and vitality are essential for success under modern conditions, and that it is to its further development and evolution that we must in all probability look for any future racial advance. In my opinion, therefore, any individual whose family history reveals the presence of a marked psychopathic diathesis should be precluded from propagation. The manifestations of this diathesis are of many degrees and assume many different forms, which are probably to some extent determined by the nature of the environment; these I cannot here describe, but I may remind you that they include the various forms of insanity, epilepsy, idiocy, imbecility and feeble-mindedness, habitual criminality, often alcoholism, and many other varieties of social incompetence. In the family record of a pronounced neuropathic stock, examples of all these varieties of defect will often be found.

(To be concluded in our next.)

OPERATING THEATRES.

ST. BARTHOLOMEW'S HOSPITAL.

Case of Acute Duodenal Perforation—Operation—Death.—Mr. D'Arcy Power operated on a working gardener, æt. 40, who had been seized with severe abdominal pain at 1 a.m., 26 hours before operation. The patient appeared to have been a healthy man leading an easy and temperate life. Some years ago, however, he had complained of indigestion, which had never caused any urgent symptoms and he had not called in a medical man. For the last fortnight he had complained of vague pains, which he had thought were due to his heart; they had not been severe enough to stop his work or alter his habits. He was in bed and alone in the house at the time of the attack, but although the pain was sufficiently great to lead him to arouse the neighbourhood, no doctor was summoned till eight o'clock on the following morning. He then looked extremely ill, his pulse was 120, his temperature sub-normal, and he was sweating profusely. Mr. Power first saw him at twelve o'clock, and found the abdomen acutely tender, especially in the right hypochondriac and iliac regions; it was greatly distended, and the patient was so ill that Mr. Power advised immediate operation, having made the diagnosis of perforated duodenal ulcer.

The operation was performed at three o'clock, 26 hours after perforation had occurred. On opening the abdomen, gas and clear serous fluid escaped in considerable quantity. The pyloric end of the stomach and the duodenum were glued to the under surface of the liver by plastic lymph. Considerable difficulty was experienced in discovering the perforation, which appeared to be situated in the second part of the duodenum and on its posterior aspect. The operation lasted an hour and a half, and was completed by a posterior gastro-enterostomy.

The patient never rallied, and died on the same evening.

Mr. Power said he recently gave a clinical lecture and showed five cases of acute duodenal perforation, in all of which recovery had taken place without any after-trouble. The present case, he pointed out, showed that a condition which is usually easily and successfully treated may present unusual and unexpected difficulties. In his previous cases the operation took less than half an hour, even when gastro-enterostomy was done. In the present instance the mere finding of the perforation took nearly an hour, and yet there was nothing in the previous history to lead the surgeon to suppose that he was dealing with a case of unusual difficulty. The patient, he remarked, as is usual in these cases, was a healthy man in the prime of life, who had had no reason to suppose that he was suffering from so dangerous a condition as duodenal ulceration, and yet the appearances shown at the operation proved that the inflammation must not only have continued for some time, but had certainly extended to the neighbouring structures, which had become extensively adherent. The diagnosis, Mr. Power said, was clear from the beginning since the sudden onset of the pain, the shock and abdominal distension in a seemingly healthy man could have been caused by nothing else but duodenal ulceration.

Mr. Power emphasised the points laid down in his clinical lecture (*Lancet*, July 13th, 1912) with reference to a patient in this category being in the prime of life and believing himself to be perfectly healthy up to the time of disaster, starting out to work without the slightest apprehension. He pointed out that the onset of pain in these cases was sudden and entirely without any exciting cause; as shock passes off the patient may complain of pain in the right iliac fossa, so the case may be diagnosed as one of appendicitis, but the surgeon should remember that in acute duodenal perforation there is always a point of maximum pain in the right hypochondrium. He said that in these cases there was a most misleading point in the manner in which abdominal symptoms subside, which may lead to operation being postponed. The surgeon should decide to operate at once if he thinks he has to deal with a duodenal ulcer.

SPECIAL REPORTS.

THE EIGHTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT LIVERPOOL, 1912.

[From Our Special Representative.]

Second Article.

The business part of the annual meeting closed on Friday last, and, regarded from the scientific standpoint, the work done has been of a very high order indeed. From the medico-political aspect, the general feeling is that the right thing has been done at the representative meeting in calling on "all practitioners to refrain from applying for, or accepting, any post or office in connection with the National Insurance Act, except in regard to sanatorium benefit, provided it is carried on in accordance with the wishes of the Association, until such time as the Government has satisfied the Association that its demands will be met." This resolution was confirmed in the report stage by 117 to 22 votes. As a further safeguard the following rider was also approved: That "before any practitioner undertakes any work in connection with sanatorium benefit under the Act, the conditions and duties of such appointments shall be submitted to the Council for its approval." These resolutions do not, of course, preclude any medical officer of health from giving advice to public bodies in his official capacity. Practically, the result of the Liverpool meeting is to cause a greater coherence and unanimity amongst the members of the Association, and, indeed, of the whole medical profession with regard to the attitude taken up towards the Government. The final decision has now been given, and the next move now rests with the Government. As might be expected, the discussion of the formation of a public medical service, under professional control, in the section of Medical Sociology attracted a good deal of attention. The weather has been favourable on the whole, and the members and visitors have taken the fullest advantage of the hospitality so lavishly bestowed by the leading citizens of the city.

Religious Services.

Speaking at St. Luke's Church on the Wednesday afternoon to a large audience, the Bishop of Liverpool (Dr. Chavasse) said that the wave of materialism that had been felt some years ago by the medical profession had receded, and the dictum of the great surgeon that he had never found a soul in the dissecting-room would no longer be regarded as a scientific pronouncement or as evidence that the soul did not exist. The influence of the mind and spirit over the body was undoubted. Both religion and science to-day were facing the question of faith-healing and the existence of that fantastic and amazing cult which called itself Christian Science, but which was a medley of bad philosophy, confused Christianity, and ecstatic optimism, which cured all evil by denying its existence. There was a great work before medical science in investigating the range of the power possessed by mind and spirit on the body, and the conditions under which it worked. The result of that inquiry would be of peculiar value to suffering humanity. It would remedy superstition, imposture, and grievous abuse. The priest of the body should always work hand in hand with the priest of the soul.

The service for Roman Catholic members was held in the Pro-Cathedral, Copperas Hill, when the celebrant was Archbishop Whiteside. A discourse was delivered by the Rev. H. Lucas, S.J., M.A., who drew a sharp distinction between mere philanthropy (*i.e.*, philanthropy divorced from religion) and Christianity. The former, he said, limited its outlook to the present life, whereas the latter, even while engaged in relieving temporal distress, always looked to man's eternal destiny, and therefore could never regard disease and pain as absolute evils, for they often proved blessings in disguise.

The President's Address.

At 2 p.m. on the Tuesday, July 23rd, the annual general meeting was held in the small Concert Hall, St. George's Hall, when the retiring President, Professor Robert Saundby, M.D., LL.D., introduced his successor in office, Sir James Barr, M.D., LL.D., F.R.S.E., a short biography of whom appeared in our columns last week, and invested him with the presidential badge. A cordial vote of thanks having been voted to the outgoing President, the meeting stood adjourned till 8.30 p.m.

The evening ceremony took place in the Royal Court Theatre, and the scene was one of great brilliance, academic costume being the invariable rule. The foreign guests and delegates were introduced to the President and Lady Barr, and a replica of the presidential badge was presented to Sir James by Mr. Thelwall Thomas, F.R.C.S., the local hon. secretary. At the President's suggestion, the gift was offered to Lady Barr, who accepted the same amid loud applause.

In the course of his Presidential address, a full abstract of which will be found on page 106, Sir James Barr said that the object of the existence of the medical profession, so far as the public were concerned, was hitherto the prevention and cure of disease, the alleviation of human suffering, and the prolongation of life. He lamented the ignorance of some of our legislators, who knew nothing and cared less about physiological laws.

What was all-important for the future of the race was that the medical profession should point out the path along which the moral, intellectual and physical health of the nation is to be evolved. Above all we must breed for intelligence. Sir James went on to emphasise the work done in preventive medicine by the medical officers of health and by school inspection and school clinics. The future progress of the medical profession lay largely in the hands of enlightened and highly-educated general practitioners, who would see to it that the complex machinery of the individual is properly lubricated and not subjected to any unnecessary friction or strain. The enlightened public would then look to their medical attendants as guides, philosophers and friends, both in health and in disease.

THE ADDRESS IN MEDICINE.

This was delivered in the Arts Theatre of the University, on Wednesday, by Dr. George Alexander Gibson, M.D., D.Sc., LL.D., F.R.C.P., Physician to the Edinburgh Royal Infirmary, upon "The Relations of the Circulation." He pointed out that modern physiology had its birth in the central facts of the circulation which, in the higher animals, was intimately concerned with mechanical arrangements, chemical changes, glandular secretions and nervous influences. Recent researches into the physiology and pharmacology of the internal secretions of the ductless glands had yielded results which had proved most fruitful in the treatment of such diseases as exophthalmic goitre, myxœdema, Addison's disease and even acromegaly. Thanks to the labours of workers in this field, the use of suprarenal extract and the active principles of other glands were often of the greatest service in disease. It was true that pharmacological investigations were often uncertain and even, occasionally, misleading, yet he felt that through these means fresh light would dawn on many a dark place in medicine. (A full abstract of the address will be found on p. 108.)

THE ADDRESS IN SURGERY.

This was delivered on Thursday, also in the Arts Theatre, by Mr. Frank Thomas Paul, F.R.C.S., Ch.M., Consulting Surgeon to the Liverpool Royal Infirmary; a full abstract of which will appear in our columns next week. He dealt mainly with his personal experiences in the surgery of the large bowel, more especially with the various methods of operative procedure for the removal of malignant disease in this region. He felt quite convinced that cancer of the bowel might at times undergo spontaneous cure. It was much easier to make a statement like this than to prove it, and he doubted if he could offer any really convincing proof. The grounds on which he based the assertion were—that for over thirty years he had been removing these growths and submitting them to microscopic investigation; that many cases having the minute structure of cancer had not recurred, though known to have been removed with an insufficient margin of safety; malignant disease of the bowel was very rarely removed during the early stage, yet the percentage of cures was remarkably good, and the duration of life after colotomy for inoperable cancer of the bowel was often prolonged compared with that in inoperable cancer cases, whilst a proportion of the cases passed as malignant cases got well and the tumour disappeared. There was some misconception concerning the relative malignancy of the three varieties of cancer. Usually the big, fungating, encephaloid type of growth was regarded as the most malignant, the colloid as being intermediate, and the scirrhous or ring stricture as the most benign. This arrangement was entirely wrong and out of accord with clinical experience. The colloid was the most malignant type, the ring stricture came next, and the fungating type was the last. It was one of the least malignant kinds of cancer to be met with in the body. The up-growing forms of cancer were essentially less malignant than the down-growing, ulcerating, and shrinking types.

Mr. Paul expressed the view that a well-planned colotomy was not inconsistent with health and reasonable comfort. If the operation were performed earlier, and also done as a preliminary stage of resection greater success would attend these procedures.

THE ANNUAL DINNER.

This was held on Thursday evening, in the Philharmonic Hall, being presided over by Sir James Barr. The interior of this handsome concert hall, the acoustic properties of which are of the finest, presented a most brilliant spectacle, the platform being beautifully decorated with flowers. A large and distinguished company had assembled, including the Earl of Derby (Lord Mayor of Liverpool), the Bishop of Liverpool (Dr. Chavasse), the Mayors of Birkenhead, Wallasey, Bootle and Southport, Sir John Byers, Prof. Armstrong, Sir Ben. Johnson, Prof. Sinclair White, Dr. T. J. Verrall, Dr. Dawson Williams, Dr. E. J. MacLean, Prof. Saundby, Dr. J. A. Macdonald, Sir Chas. Petrie, Mr. Helenus R. Robertson, Mr. F. T. Paul, Mr. John Rankin, Prof. W. Stirling, Prof. Kuliabes, Judge Taylor, Judge Thomas, Prof. Gabbi, Prof. McDill, Prof. Cameron, Prof. Blanchard, Dr. Stewart, Archdeacon Madden, Mr. J. W. Hughes, Mr. Wade Deacon, Mr. Stuart Deacon, Mr. T. E. Sampson, Ald. Roberts, Col. Porter, and many well-known citizens identified with all phases of civic life.

Dr. J. A. Macdonald (chairman of the Council), in proposing the toast of the "City and University of Liverpool," said it was very appropriate that the head of the city of Liverpool, the Lord Mayor, and the Chancellor of the University should be united in one person, and doubly so from the fact that that person was the head of the great family of Stanley—a house that had always been famous in English history.

Lord Derby, in replying, said that Liverpool could justly claim, both in her University and in her Corporation, to merit appreciation at the hands of the medical profession. Liverpool had been the pioneer in establishing a school for tropical medicine at the University, and London had followed. He hoped the time would come when all conditions of men would sink their politics and do in actuality what at the present moment they only did in profession, and that was to do all they possibly could do to secure the health, and by the health the happiness and prosperity of those who lived about them.

The principal toast of the evening, that of "The Association," was entrusted to the Bishop of Liverpool, who claimed the quality of hereditary sympathy with the profession, for during a period of two hundred years his ancestors had been connected with the medical profession. He briefly sketched the connection of the Association with Liverpool, mentioning that this city had a great deal to do with the launching of the Association. He thought he might say that he expressed the feelings of the vast majority of Englishmen outside the medical profession when he said he was sure the public were as anxious that they (the doctors) should receive a living wage as did the colliers, and that the thought of their noble and beneficent profession being on half-pay, starved and straitened, was abhorrent to the minds of every Englishman and every Britisher.

Dr. Ewen J. MacLean (Chairman of the Representative Body), responding, said that the last time they met in Liverpool the membership of the Association was 10,000, and now the membership was 25,000, they having added to the roll during the last year 4,000 members. That was one indication of their strength, and an obvious result of the great crisis with which they were at present faced. Their strength to-day did not consist in the terminology of their resolutions or in what was said from time to time in the various sections of their annual meeting; it did not even consist of the forceful rhetoric of their President for the time being. He feared that our constitution was as much misunderstood by the public as we sometimes misunderstood their constitution. He wished to say once and for all that the dominating body of the British Medical Association was the Representative meeting of the Association. He wished to tell the public that the profession were not losing sight of their interests in this matter. If it could be proved to the profession that their demands and their policy were absolutely unjust and unfair to the interests of the public, there-was not a man amongst them who would not set to work to modify them. That point, however, was far from being proved, and it was well that the public should be assured that in that great crisis and great fight the doctors had their interests near to their hearts. Let the public consider what an enormous effort of accommodation the Insurance Act had called upon the profession to perform. There never was a time in the history of social evolution when at such short notice the whole profession had been called upon to accommodate itself to an entirely new condition of things. Much had been said about the breaking off of negotiations, and much had been said which showed that the position of the profession had not been understood. By the term, "breaking off negotiations," they did not mean that for all time they would boycott the Insurance Act. Their point was that such conditions should be granted to them as would enable them to serve and work the basis of benefit of that great Act, not only in their own interest, but in the interests of the country at large. What, then, did they mean by breaking off the negotiations? They meant that something must be done, and done soon, to dispel that distressing atmosphere of uncertainty. They wanted to know what they were going to be called upon to do. They did not know that yet; there had been no definition of it. It was psychologically impossible that the representative meeting at this time could have said in respect of working the Act either "Yes" or "No"—at that time of uncertainty, with so many factors undetermined, to say either one or the other, would be to gamble with the interests of a great profession. "I say this with a full sense of responsibility," said Dr. MacLean, "that in my view the contents of the letter we received from the Chancellor of the Exchequer, through the Commissioners, was well and sincerely meant, but we decided, rightly or wrongly—I think rightly—that it is calculated to prolong again this period of uncertainty. In regard to the proposal of the Chancellor of the Exchequer, it is to be noted that at all events one division of the Association proposed that in the event of its being assented to, my two good friends, Dr. Macdonald and Mr. Verrall, and myself, should be the three chosen to approach the Chancellor and the Commissioners, subject to ratification by a representative meeting. That matter has been decided. We are not going. So far as myself and my friends are concerned, we are not disposed to be a modern version of Shadrach, Meshech, and Abednego. I say in the present state of this great question, it is time that the Government should at once define the duties we are expected to discharge, both as regards the normal medical benefit, and also on the points that are to be regarded as extras."

The toast of the guests was given by Mr. Robert Jones, President of the Liverpool Medical Institution, and responded to by Mr. H. R. Robertson and Prof. Albert Abrams, of San Francisco, and the health of the President was given by Sir John Byers.

During the evening an excellent musical programme was provided by Mr. W. A. Hollis's orchestra.

Various Meetings.

The Irish Medical Schools' and Graduates' Association held its annual summer meeting and luncheon at the Exchange Station Hotel on the Wednesday, under the presidency of Dr. H. Macnaughton-Jones. An attempt to discuss the policy of the British Medical Association by one of the guests was frustrated by the firm action of the Chairman, who declined to allow any speeches except those relating to the toasts.

The annual luncheon of the Continental Anglo-American Society was held on the Thursday, at the Midland Adelphi Hotel.

The Temperance Breakfast.

This function, now quite a recognised social feature of the annual meeting, was held in the Walker Art Gallery, under the auspices of the National Temperance League, on the Thursday morning. Mr. Alexander Guthrie presided, being suported by Sir James Barr and Professor Mott, F.R.S., and a large company.

The Chairman said he thought those breakfasts afforded an opportunity of bringing supremely important subjects before people who more than others had the power of influencing their fellow-men in regard to alcohol and its dangers. Whether they were abstainers or were only amongst the almost persuaded, they must all equally recognise what a factor alcohol was in their national life, and how extremely important it was that right and ripe views should be formed in regard to it.

Sir James Barr remarked there was no doubt in his mind that people took too much alcohol; still the fact remained that people were becoming more temperate now. Even at public dinners there was considerably less drinking now than ten years ago. For his own part, he practically never prescribed alcohol in any case of disease, because people very often prescribed too much for themselves. He knew of no disease from which a patient would get on better with it than without it.

Professor F. W. Mott, M.D., in an instructive address, said he was of opinion that intemperance was largely due to the fact that the casual labourer and the casual workman had to live in many instances under most unsatisfactory hygienic conditions, and the great problem before the nation was to try to improve the housing conditions of the poor. There could be no question that a lot of good material was spoilt by bad environment. He looked upon the chronic inebriate as a great danger to the community, and he thought he should be segregated. Continuing, he said he had come to the conclusion that alcohol might be more or less a weed-killer, inasmuch as it killed off those who were susceptible to its influence, or brought them into asylums, where they were prevented from the propagation of their species. If, however, it was a weed-killer, he would ask whether it was not also a weed-producer. Examinations of the stocks of people addicted to drink often showed that in many cases the habit had been handed down to men, or that their parents were subject either to degeneracy or insanity. It was the duty of the State to prevent disease, and he knew of nothing better able to prevent disease and to cope with intemperance.

The University Degree Ceremony.

On the Friday afternoon the University of Liverpool conferred honorary degrees upon five distinguished members of the medical profession, the ceremony taking place in the Philharmonic Hall, where a Convocation was held. Lord Derby, the Chancellor of the University, presided, and the recipients of the honours were Professor George Armstrong (of Montreal), Professor George Alexander Gibson, Sir Wm. M'Ewen, Emeritus Professor Frank Thomas Paul, and Sir James Barr.

The opportunity was taken at the same time to confer the honorary membership of the British Medical Association upon Lord Derby, the certificate being presented to him by Dr. Ewen J. Maclean, of Cardiff, Chairman of the Representative Body.

THE CENTRAL MIDWIVES BOARD.

The Central Midwives Board met on the 27th inst., Sir Francis Champneys in the chair.

A letter was read from the Clerk of the Council referring to the

Salary of the Secretary of the Board,

and suggesting that a limit of age should be fixed for retirement. The recommendation of the committee was adopted—viz. (*a*) That, in accordance with the communication received from the Clerk of the Council, the salary of the present Secretary be increased, as from April 1st last, by annual increments of £25 to a maximum of £750 per annum. (*b*) That he retire at the age of 65.

N.B.—The question of the Secretary's salary is understood to be subject to revision on the first vacancy.

A letter was read from a candidate who had failed to pass the Board's examination on two previous occasions, and who for the purpose of obtaining a post falsely stated that she had passed the examination, asking permission to enter for the next examination. It was agreed that the candidate be informed that her certificates of character are void, and that she cannot be admitted to the examination until the Board is satisfied by special testimony that she is a trustworthy person.

It was decided that the correspondence between the Board and the East Sussex County Council with regard to the failure of Sarah Linton to notify on two occasions when she had advised medical help should be forwarded to the Privy Council.

The application of the Norwich Maternity Charity for renewal of permission to hold written examinations there was granted.

The Standing Committee had had considerable discussion over a letter from the M.O.H. for Manchester suggesting that pupil midwives should be obliged to reside with the midwife by whom they are being trained. Miss Paget strongly opposed the idea, and finally it was agreed to reply that the Board is not prepared to amend the rules at present.

A letter was read from a candidate who successfully passed the last examination complaining of the manner in which she had been treated by one of the examiners. It was agreed that no action be taken in the matter.

The Chairman had been in correspondence with the Newport Health Committee and with Miss Barrett, endeavouring to put an end to the constant friction between those parties; as a result it was hoped that there would be no further obstacle to the friendly co-operation of the Newport Training Home and the Health Committee in future.

A letter was read from the County Medical Officer for Cheshire as to the propriety of advertising by a midwife.

Sir George Fordham moved, Mr. Parker Young seconded, and it was agreed that the reply be that the Board is unable to express an opinion on matters which may come before it in a judicial capacity.

Harriet Hayes, Alice Llewellyn, Matilda Middelton, and Jane Nurcombe were removed from the Roll at their own request.

With a view to establishing larger training schools in the future, instead of a number of smaller ones, the Chairman had made inquiries at some of the leading lying-in hospitals as to whether they would be prepared to accept outside pupils.

The acoustic properties of the new examination hall were discussed. Mr. Parker Young complained very much, and said that the constant reiterated command to "speak louder" was apt to make the candidates nervous. The Chairman thought they had not had enough experience of it yet to make any official complaint. It had been suggested that the Board should bring pressure to bear on local authorities in order to make the compulsory notification of ophthalmia neonatorum universal. The Secretary had made inquiries, and found that out of 75 boroughs only 25 had compulsory notification. It was proposed and agreed that in future when a local supervising authority sends up a charge against a midwife of neglect of the rule with regard to the babies' eyes, the Board should inquire whether notification of ophthalmia were compulsory, suggesting that the only way to avoid the recurrence of such neglect was to make it compulsory.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, July 27th, 1912.

Dwarfs.

Dwarfs are men in miniature; their organisation, height excepted, is as perfect as that of any other men. But it would seem that they do not procreate dwarfs as might be supposed; their children reach the height of ordinary individuals.

However, say the *Annales de la Science*, it is worthy of remark that where there is a dwarf in a family, the child that follows is of ordinary height, but the next one is also a dwarf.

The intelligence of dwarfs is not inferior to that of ordinary persons, as the history of the three following would prove:—

Jeffery Hudson was eight years old when the Duchess of Buckingham presented him in a pie to the Queen of England, Henrietta Maria, wife of Charles I.; a little later, to the great surprise of the spectators, he was seen to issue from the pocket of a servant of the palace of gigantic proportions, who had brought him in in this manner to amuse the Court.

In 1644 Jeffery accompanied Queen Henrietta to France, where a German made some slighting observation about him in his hearing. Jeffery felt very much offended, and provoked his insulter to a duel. The German came on the ground with a syringe! This excited the fury of the dwarf, who forced his adversary to engage in serious combat on horseback and and with a pistol. The German was killed.

At 30 years of age Jeffery was only 20 inches high, but he then began to grow, and finally attained the height of nearly four feet. He died in 1682 in the prison of Westminster, where he had been thrown for a political offence.

The second dwarf was called Borwilawski and was a Polish gentleman, celebrated for the variety of his talents. He wrote his own biography, and thus became famous throughout Europe. Like Jeffery, he presented the marvellous phenomenon of growth in old age.

The third and last is Bébé, whose skeleton is preserved in the Natural History Museum; his wax statue is still to be seen in the School of Medicine, dressed in the clothes he used to wear when alive.

He was so small when he was born that he was brought to baptism on a plate wrapped in cotton! His cradle was a padded wooden shoe. At five years old he was already formed like a man of twenty, and weighed 9 lb. 8 oz. He was brought to Poland, to the Court of King Stanislas, to whom he became sincerely attached. The King also had a great affection for him and tried to have him educated, but it was in vain. Bébé never learned anything beyond dancing and beating time; he never could be taught to read.

Up to 16 years old he was of a lively and playful disposition, but from that age he began to lose his cheerfulness and a kind of premature old age overcame him. He died at 22, and was then three feet high. He was married to a female dwarf, whose height was also three feet. She lived to the age of 73. and died in Paris in 1823.

Beer Yeast.

Beer yeast, a living organic ferment, is constituted, says Dr. Aural in the *Journal des Practiciens*, by cells more or less ovoid, which breathe and multiply with amazing rapidity.

From a chemical point of view, beer yeast is an alcoholic ferment; it transforms sugar into alcohol and carbonic acid.

As to its therapeutic action, it is due on the one hand to its special fermentation, and on the other to the presence of a ferment combating morbid germs it meets in the organism. Two forms are used in medicine—the liquid, or fresh, and the dry.

The former is well known—a brownish, creamy liquid with a certain odour of beer. Far from being a fixed product, it is a complex mixture composed of numerous kinds of yeast of inconstant therapeutic action, hence preference should be given to the drv yeast.

Beer yeast has been particularly employed in the treatment of furunculosis, anthrax, acne, and other affections of the skin. It acts on the dyspeptic troubles of the stomach and intestines, frequent causes of those tegumentary maladies.

But it is not only here that yeast possesses a marvellous action; in certain suppurations it is a good therapeutical adjuvant. In the little recurrent abscesses of the eyelids (stye) its employment diminishes rapidly the tumefaction; in conjunctivitis the same results are obtained from local applications. Like may be said of phlegmonous tonsillitis, the lancinating pains disappear and the patients make a rapid recovery. Eruptive fevers have been more or less influenced by beer yeast, especially small-pox, where under its influence the vesiculæ dry rapidly and the general symptoms are very much improved. In the gastro-intestinal complications of typhoid fever beer yeast has been given with profit; the same may be said of cholera nostras.

In pneumonia, broncho-pneumonia and acute bronchitis the yeast produces a decrease of the expectoration and the patient recovers, if the drug is sufficiently prolonged, in a few days.

In diabetes yeast has been given with great advantage, as it acts on the glycosuria of alimentary origin, and thus allows the patients to partake of farinaceous foods and bread.

GERMANY.

Berlin, July 27th, 1912.

AT the Orthopädische Gesellschaft, Hr. Hans Virchow gave a description of

THE FOOT OF THE CHINESE LADY.

He had interested himself in the matter, as he had had the opportunity of examining the skeleton of such a foot, and he had also examined Roentgenograms of three others kindly placed at his disposal by Dr. J. Fränkel. The examination was made in the following manner: First a plaster of Paris cast was taken in order that the outward form might be retained; secondly, a Roentgen plate was taken from both radial and lateral sides; the soft parts were most carefully dissected, after maceration each bone was carefully compared with a normal bone; the bony parts were then carefully put together; photographs were taken at every stage of the examination, and these were brought to the full size by enlargement.

The X-ray illustrations did but little to illuminate the condition, and, in fact, were in themselves illustrations of the comparative uselessness of them when there was nothing else to depend on. The only direction in which the plates were of use was in showing the spongy structure of the bones. The results of the examination were roughly the following:—The reduction in size was not an irregular one, one without any plan, but all changes were accurately limited locally, and so sharply characterised that two distinct categories could be determined, resulting in two groups.

Whether the diminution in size was due to arrest of growth or in part to atrophy could not be determined with certainty. Direct atrophy from pressure of the bandages could only be determined at two points—the upper part of the back of the calcaneum and the lateral side of the fifth metatarsal bone. There was hindrance to growth from pressure of the bones on each other. There was also nutritive atrophy, also atrophy from absence of use in the parts.

The malformation was of two kinds—flexions and rotations. The following was observed at the joints:—Extreme gliding of opposed joint surfaces, thinning of the cartilage over the bones, here was a curious knotting or knobbing of the free lying cartilages, limited to the dorsal surfaces of the bones from the second to the fifth. The ligaments were in part displaced and shortened, but otherwise normal.

The muscles were more reduced in volume than would have been expected; they had a very delicate appearance. The substance of the muscles was, however, perfectly sound.

There appeared to be nothing that could be said to be pathological beyond the knotty cartilages of some of the joints. All the rest were, it was true, deviations from the normal, but there was no condition that could have been called morbid. The observations were instructive as regarded other deformities. In the foot of the Chinese lady there was nothing of a pathological nature; all was caused by mechanical means. In the case of other deformities, on the other hand, there was almost always a disease that set up the deformity, and the total end product was too often looked upon as pathological. This was not justifiable.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

RESIGNATION OF PROFESSOR GREENFIELD.—Professor W. S. Greenfield, who has occupied the chair of Pathology since 1881 in the University of Edinburgh, has resigned his position, the resignation to take effect on September 30th. His resignation will probably lead to a complete reorganisation of the Pathological Department in the University. Hitherto the Professor of Pathology has always had charge of wards in the Royal Infirmary, and has been one of the Professors engaged in teaching clinical medicine. In the future other arrangements will have to be made, as, owing to the specialisation of pathology, it is no longer possible to unite the two branches of medicine. It is understood that money, amounting to some £30,000, is now available for the foundation of a chair of Bacteriology, and presumably the Pathological chair will be divided into two—a chair of Pathology proper, and a chair of Bacteriology. It is also obvious that in the interests of pathological teaching in Edinburgh the Professor of Pathology ought to be at the head of the Pathological Department of the Royal Infirmary, instead of, as as present, having no direct connection with it. It is therefore expected that some arrangement involving this will be come to. As the new Professor, whoever he may be, will in all probability not teach clinical medicine, a proposal is being mooted for creating a Professorship of Clinical Medicine. It should be explained that at present there is no chair of Clinical Medicine in the University. The present arrangement is that certain of the Professors hold wards in the Royal Infirmary by use and wont, and at the pleasure of the managers, and that they teach Clinical Medicine. As, owing to the new arrangement, the number of these Professors will be diminished by one, two possible courses are open. The University may either appoint one of the ordinary physicians to the institution to be a University Lecturer on Clinical Medicine, or they may create a chair of the subject. In the former case, of course, the holder of the Lectureship would not enjoy the status of a professor. On the other hand, were a Professorship created the holder of the office would be in the position of having to create an entire department, and this seems, on the whole, to be the best solution that could be arrived at. A suggestion has been made that the holder of the prospective chair (if, indeed, one can speak so definitely on a subject which is entirely in the air) should be required to give his whole time to it and withdraw from practice. Whether it will be possible to get anyone of sufficient standing to undertake the work on these terms seems very doubtful. In any case, the present occasion is one in which the teaching of many of the most important branches of medicine is involved, and it is to be hoped that no vested interests will be allowed to stand in the way of a well-thought-out plan of settlement.

ANNUAL REPORT ON THE HEALTH OF EDINBURGH.—From Dr. Williamson's report for the year 1911 it appears that the death-rate was 14.4 per 1,000—the lowest in the annals of the city. Cancer takes a prominent place in the causes of mortality, the deaths from this disease being actually more than those from phthisis—405 as against 392. The number of notifications of infectious disease, excluding phthisis and cerebro-spinal meningitis, fell considerably short of previous years, reaching only 1,967, or 6.1 per 1,000, as contrasted with 7.1 during the previous year. The largest number of notifications referred to scarlet fever (1,075), while enteric fever accounted for only 31 cases. Edinburgh is rapidly becoming immune from the latter disease. The adoption of the Notification of Births Act and the systematic supervision and visitation which follow it have reduced the infantile mortality to 115 per 1,000. Phthisis notifications are on the increase, probably on account of earlier and more accurate diagnosis. The population of the city, as determined by the census last year, was 320,318 (143,436 males and 176,882 females). The progress of the population of the city has undoubtedly received a serious check. The 6,819 births registered work out at 21.2 per 1,000—only 691 for every 1,000 expected. A feature which is rather peculiar in the birth statistics for the year is the reversal of the balance of the sexes, the females, contrary to general experience, being in excess of the males as 103.9 to 100. The mortality from infectious disease has not fallen materially. Deaths from tuberculous diseases amount to 182 per 100,000, compared with 256 in Greenock, the highest, and 167 in Paisley, the lowest, in Scotland. In view of the dwindling records of deaths certified as due to alcoholism, a comparison has been made of the mortality resulting in recent years from cirrhosis and other diseases of the liver. Last year there were 28 such deaths, a reduction of nine on the average of the preceding five years.

National Insurance Act.—The decision of the British Medical Association to suspend negotiations with the Government is welcomed in Edinburgh. It is felt that it is the only possible course under the circumstances. There is also very general approval of the action taken in reference to sanatorium benefit. From every point of view it would have been disastrous to have boycotted this because it is impossible to work the ordinary medical benefit—such, at least, is the view held here.

Dr. G. A. Gilson.—The honour which the University of Liverpool has conferred on Dr. Gilson is universally approved. Dr. Gilson is deservedly popular in both lay and medical circles in Scotland, and all his numerous friends and admirers are delighted that he should have been so sought out for distinction.

BELFAST.

Public Health.—The death-rate last week in Belfast was 14.5, and except for a few cases of scarlatina and diphtheria the city was free from zymotic affections. No case of typhoid was reported, though if the present close and warm weather continues we can hardly hope to escape it.

The Insurance Act.—It is satisfactory to be able to state that all the medical practitioners of the city have signed the undertaking drawn up by the Dublin meeting, and no refusals have been met with. Notice is being given to the various societies as to the termination of their agreements with medical men. Rumours of large schemes for sanatoria are current: it is said that the Corporation is going to take over the Abbey Sanatorium from the Board of Guardians and further develop it. The public generally seem hardly to have realised the importance of the movements on foot, but medical men are taking a deep interest in them, and also in the various appointments connected with them. At Londonderry the Mayor presided at a special meeting of the Public Health Committee to consider the sanatorium question, and he begged the members to take plenty of time and do nothing rashly. He said that the present Foyle Hill Hospital cost about £1,500 a year for an average of three or four patients, and he calculated that a sanatorium for at least twelve patients would cost another £2,000 or £2,500 per year. The income under the Act would not nearly meet this. A subsequent speaker ventured to doubt the accuracy of the Mayor's figures, and said that provision could be made on a cheaper scale.

Street Traffic.—A number of accidents, some of them serious, have lately occurred in connection with motor traffic in our streets, and as a large proportion of medical men now do their work in motors, they naturally take an interest in the traffic question. A London visitor who has been driving through the city with a local medical man says that Belfast is the worst regulated city, as regards traffic, that he has ever been in, and that he would far rather drive his car through the City of London than through the streets of Belfast. The ordinary vanman seldom, if ever, signals to those behind him, and is often seated so far back under the hood of the van that he cannot even see to the sides, much less behind. Police regulation needs improvement and extension, and the time seems to be ripe for some public movement to improve our streets. There is really no excuse for their being bad, for, on the whole, they are wide and well kept, with few awkward corners.

Death of Dr. Hampton Dougan, I.M.S.—Much sympathy is felt with Dr. George Dougan, of Portadown, at the sad death of his eldest son, Dr. Hampton Dougan, a Captain in the Indian Medical Service. He had lately been stationed in Burma, where he contracted blood poisoning and died last week. Captain Dougan was educated in Dublin, and graduated at Trinity College in 1900.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

MR. SEWILL'S EVIDENCE BEFORE THE SELECT COMMITTEE.

To the Editor of The Medical Press and Circular.

Sir,—If you think that a brief statement of the case which I set before the Select Committee on Patent Medicines, to which you so kindly refer in your leader of to-day, is likely to interest your readers, perhaps you will publish this letter. I appeared as a witness on behalf of the British Medical Association. My instructions were to affirm the statement that the traffics under inquiry are almost entirely fraudulent; that they give rise to a vast amount of preventable suffering and misery, and form the direct and indirect causes of a considerable mortality. I was to strive to prove that newspapers which derive great incomes from quack advertisements are either aware of these facts, or display more or less culpable negligence in not taking notice of information on the subject which is constantly thrust before their eyes, even, in some cases, by their own editors and paid contributors.

I began by pointing out that the character of the trade in quack medicines and apparatus had been fully exposed in the civil and criminal courts of every grade during the past fifty years; that it had been constantly dealt with in the Medical Press and Circular and in all medical papers, and particularly in the "Secret Remedy" articles in the *British Medical Journal* and in the "Quarterly" number of that journal. I next showed that many of the leading daily papers had on their staffs medical editors, and that these were allowed from time to time to stultify themselves in articles exposing and denouncing forms of quackery advertised and bepuffed in the same pages; and I handed in to the Committee numerous examples of these articles and of the advertisements and puffs to which I referred. I next showed that the same remarks applied to the leading provincial dailies, and I produced evidence that inferior papers, both in London and the country, justify their conduct in accepting the most fraudulent and vile advertisements by the plea that similar announcements appear in leading journals. I next spoke of the class of anti-scientific papers that devote themselves more or less to disparagement of the medical profession and depreciation of medical science, and showed that the coarsely fraudulent character of the advertisements with which they fill their pages can be demonstrated incontrovertibly by chemistry alone to any intelligent man, although devoid of physiological knowledge. From this I passed on to speak of certain papers that proclaim as their special function the exposure of humbug and fraud. I presented articles from these prints denouncing certain impostures, and handed in fraudulent puffs and advertisements from the same issues. Next I referred to certain papers that exclude quack advertisements, and pointed out that if these papers, some of which certainly have neither medical editors nor contributors, find no difficulty in discriminating there can be no excuse for the conduct of many of their contemporaries. I pointed out that the whole British Press assumes the *rôle* of censors of morals, guardians of the welfare of the poor, protectors of the honour of the nation, and showed that the simple and suffering people take the appearance of advertisements in high-class papers as a guarantee of the good faith of the authors.

My evidence did not call forth a single hostile question. It is satisfactory to know that the whole of the testimony is being printed verbatim, and in due course will be published in the form of a Blue Book.

Incidentally the inquiry is disclosing the fact that a vast amount of practice by unqualified quacks is carried on under the cloak of the trade in nostrums and bogus instruments; and altogether a mass of evidence will be gathered which ought at least to compel the attention of the legislature. The Select Committee is instructed to report to the House as to whether they consider legislation is called for. They cannot in my opinion, fail to recognise the need for new laws to deal with the gigantic evils into which now for the first time an authoritative inquiry is being systematically conducted.

I am, Sir, yours truly,
Henry Sewill.

The Old Rosery,
Earlswood Common,
July 24th, 1912.

ARTHRITIS DEFORMANS AND A PURIN-FREE DIET.

To the Editor of The Medical Press and Circular.

Sir,—I have read Mr. Kellett Smith's article on arthritis, published in The Medical Press and Circular, July 17, 1912, with great interest, and congratulate him on his success.

For many years I have held that arthritis deformans is not the hopelessly intractable ailment, or symptoms complex, some would have us believe.

I hold that it is produced by the toxins of micro-organisms and the by-products of imperfect metabolism of foodstuffs, for the most part. Of course, poisons of other kinds may contribute such as nicotine, alcohol, lead, etc.

I find it difficult to believe that purins in their normal condition act as powerful irritants. I do not think they do so unless digestion is impaired and they are changed into poisons either by the vitiated secretions of the digestive organs, the toxins of micro-organisms, or both.

A mucous membrane in a state of catarrh is laden with germs and toxins, it is therefore impaired and not in good condition for performing its natural functions of secretion, absorption and elimination.

Year after year I find authors persistently ignoring lingering infections. If a mucous membrane is catarrhal, it is retaining the germs of some previous infection, such as influenza, or is impaired by the toxins of germs lingering in some other part of the system.

I hold strongly that all infections linger indefinitely and are the basis of all chronic illness. That the typical germs cannot be found always by present-day methods is no proof whatever that they do not exist.

If we can promptly relieve a patient's sufferings by regulating his diet, well and good. We should not stop there, however. We should endeavour to rid his system of offending germs. If we can be certain that some particular germ is chiefly at fault, then a suitable vaccine may be tried. The results of this form of treatment are often very disappointing, however.

Two cases have recently come under my notice which seem to illustrate this.

(1) A lady who had suffered from arthritis for over 20 years was treated for a considerable period with a vaccine prepared from germs found in her tooth sockets. She did not improve. Later on she came to me and I treated her by means of continuous counter-irritation; within a month she said she was in much better general health, and could walk with more ease and power.

(2) A lady who had suffered from asthma for many years, and who had become very thin and weak, was treated for eight months with a vaccine prepared from a culture of Friedlander's bacillus found in the nose. Expectoration diminished and she felt rather better in herself, but a paroxysm of asthma occurred regularly in the middle of the night and again on waking after a few hours' sleep.

With the consent and approval of her usual medical adviser she came to me eventually.

I also treated her by means of continuous counter-irritation. Within two months the asthma paroxysms ceased and she left for home. This was quite recently. I do not, therefore, know to what extent the benefit will prove lasting, but in a number of other cases of asthma, longer under my observation, the improvement has been maintained indefinitely. My opinion is that we should use our utmost endeavours to restore the digestive functions to such a state of efficiency that they can deal with moderate quantities of any kind of food successfully, rather than permanently to adapt food to the powers of the damaged mechanism. I published an article in The Medical Press and Circular, May 8th, 1912, on continuous counter-irritation. I trust this letter is not too long.

I am, Sir, yours truly,
W. J. Midelton.

Bournemouth,
July 24th, 1912.

INSURANCE ACT—MEDICAL ASPECT.

To the Editor of The Medical Press and Circular.

Sir,—Under the inspiring leadership of Sir James Barr, whose outspoken opinion of the Insurance scheme every honest thinking person must heartily endorse, the medical profession has decided, with a unanimity that is striking and significant, to be done for ever with the miserable position assigned to its members under contract practice, and to refuse the dishonourable proposals of Mr. Lloyd George in connection with this Act. Much valuable time has been lost by unsatisfactory and unstatesmanlike manœuvring over the medical difficulty; but now that their decision has been announced, the most strenuous efforts must be made by medical men to organise their forces. The profession has issued its ultimatum, and it is only wasting time, and so preparing for disaster, to prolong negotiations which are clearly meant to create and to keep up disunion in the medical ranks. The Chancellor of the Exchequer, with his handsomely paid assistants and Trades Union and other officials, are pushing on their part of the work with tremendous energy, and that work will assuredly tell when the medical panels are made up unless the members of the profession are organised *at once*. We should be working as strenuously as they are to have our forces thoroughly and completely organised, for according to the thoroughness and perfection of our organisation will be its usefulness and success. The great and important point *now* is to lose no time in completing this organisation, for those medical men who have not yet signed the "pledges" are much more likely to do so now—six months before any action can be taken—than they will be at the end of the year, when it is the end of battle and their forces are disorganised. And it is quite certain that with a perfected organisation, the medical profession will get the fair and reasonable terms asked for long before the end of the year. But an *immediate* perfecting of organisation is absolutely essential, and to obtain this strong measures must, if necessary, be resorted to. For the guidance of those gentlemen in charge of the agitation I would suggest action on the following lines:—

1. Intimate that by a certain date—say, 31st August—all pledges must be sent in to the proper quarter. After that date the names of all members of the profession who have not "pledged" will be published.

2. Members of the profession to pledge themselves not to call in "unpledged" consultants. Consultants to pledge themselves not to meet "unpledged" members of the profession. This is a most important point, and is strongly emphasised by Dr. Russell, of Edinburgh.

3. Members of the profession who have not already done so, to pledge themselves not to go on the medical

panels for insurance work, not to do any Friendly Society work after the termination of existing yearly contracts on December 31st.

4. Get all newly qualified men, those recently qualified, and those to be qualified at the final examinations before December 31st, to pledge themselves as in No. 3.

Members of the profession can easily see that if they loyally, faithfully and unitedly support each other as above, their reasonable demands will very soon be granted, for the Act cannot be worked without them. It has already been shown that there are ample funds to pay much more than an 8s. 6d. capitation fee, but surplus funds have been held up as bribes to insured persons in the form of "additional benefits," therefore the doctors must suffer. The matter lies entirely with the profession, which has only to present a firm and united front in order to succeed. But the party *must* be united—that is absolutely necessary; and that member of the profession is not to be envied who does not, at the critical time, form one of the party. As for the poor insured persons, whose contributions are now being levied under very shadowy and uncertain conditions, they are much to be pitied if the medical difficulty is not soon solved. For if any medical men will be found mean enough to betray their party, they can only be classed as among the "undesirables" of the profession.

I am, Sir, yours truly,
Angus Macphee, M.D.

Glasgow, July 27th, 1912.

N.B.—There is a guarantee fund to compensate those members of the profession who may suffer loss through their pledges. This fund is already largely supported, and will without doubt be considerably added to if energetic measures are adopted to organise the profession. As stated above, the guarantors will not be called upon to pay if medical men stand by each other shoulder to shoulder.—A.M.

OBITUARY.

MR. E. STANMORE BISHOP, OF MANCHESTER.

We much regret to announce the death of Mr. Edward Stanmore Bishop, which has taken place at Manchester, in his sixty-fifth year. The deceased, who had been F.R.C.S.Eng. since 1884, studied at Manchester and the London Hospital. Mr. Bishop was widely known as an operating surgeon in the North of England, having been attached to the Ancoats Hospital for many years. He was also specially interested in gynæcology, and he was operating surgeon for diseases of women at the Jewish Memorial Hospital, Manchester. He was President of the Manchester Clinical Society and Vice-President of the Manchester Medical Society. He was the author of numerous works on gynæcological and surgical subjects, many of which have had an extensive circulation in America as well as in this country. Mr. Bishop was a member of the Council of the Royal Society of Medicine.

DR. LOUISE APPEL, OF BOMBAY.

The death has taken place at Madanapalla, Madras Presidency, on July 22nd, of Dr. Elizabeth Louise Catherine Appel. The deceased took the B.Sc.Lond. in 1886, becoming M.D., B.S. in 1894-5. She was formerly attached to the staff of the National Anti-Vivisection Hospital, and she had held the posts of medical registrar and assistant anæsthetist at the Royal Free Hospital, house surgeon and lecturer at the Clapham Maternity Hospital, clinical assistant at the New Hospital for Women, lecturer on obstetrics and gynæcology to the Queen Victoria Jubilee Nurses, and demonstrator in anatomy at the London School of Medicine for Women. She was the author of "How to Become a Certified Midwife," "The Bishop of London on Theosophy," a translation of Dr. Kleinschrod's "The Inherent Law of Life," and a paper on "Feeling and Emotion in Eastern and Western Psychology: Their Bearing on Crime and Insanity."

REVIEWS OF BOOKS.

WHITLA'S DICTIONARY OF TREATMENT. (*a*)

This well-known *vade mecum* of medical and surgical practice is now a portly volume containing upwards of 1,200 pages of close print—none too much in view of its very comprehensive scope: ringworm of the beard to railway spine, from comedones to cornu, from occlusion of hymen to folliculitis decalvans, with every intermediate stage. We are tempted to question the utility of burdening the pages with synoptic descriptions of major operations. Even medical missionaries, with whom the work is very popular, probably carry round at least one text-book on operative surgery, and in any case the instructions would hardly suffice to guide a novice.

One of the qualities of a practical work like this one is to tell what to do in emergencies—the morbid condition may or may not admit of curative treatment, but something must be done, certain measures are expected to be applied under particular circumstances, quite irrespective of their therapeutical importance. This is the "small talk" of medical science which keeps conversation going. With it handy for reference one is sure never to be caught napping when confronted with a given set of pathological conditions for the first time. This is both the object of and the justification for such a volume as the present, and, we may add, this object is admirably filled in this, the enlarged and in great measure re-written fifth edition.

EXPERIMENTS ON ANIMALS. (*b*)

Lord Cromer expresses the opinion that this book will be found useful by a great number of people who are interested in the subject of vivisection but have not time to study the voluminous report of the Royal Commission or the bulky minutes of evidence on which that report is based. The evidence is here re-arranged and grouped under such headings as "Medicine," "Diseases of Animals," "Anæsthetics," etc., but it is given in the words of the witnesses. To the sane and unbiassed mind there is no doubt left of the enormous debt which medical progress owes to animal experiment, and just as little regarding the care and humanity with which the experiments are carried out. The outstanding feature of the evidence is the rather pitiable appearance made by some of the anti-vivisection witnesses, one of whom was told by a Commissioner that he did not seem to have realised his responsibility in appearing at all. Mr. Paget's work has been well done.

SURGICAL CLINICS. (*c*)

This, the first of the series, contains a number of interesting articles on various cases—*e.g.*, carcinoma of the breast, cystadenoma of the breast, pelvic tumour (two cases), nerve anastomosis (two cases), Charcot's disease of the hip-joint, duodenal ulcer, etc. These are all verbatim reports of clinical lectures delivered by Dr. Murphy to the students in the hospital, so, though they may not show great literary merit, they have the great advantage of retaining the lecturer's breezy personality and dogmatic insistence. The result is that the whole volume makes more interesting reading than would a corresponding collection of papers. The illustrations are clear and to the point, and the paper used is good. The work should appeal to a large circle of readers, especially those who are so situated as to be unable to refresh themselves by occasional visits to the clinical hospitals.

(*a*) "A Dictionary of Treatment." By Sir William Whitla, M.D., Professor of Materia Medica and Therapeutics in Queen's University, Belfast, etc. Fifth Edition. London: Bailliere, Tindall and Cox. 1912 Price 16s. net.

(*b*) "For and Against Experiments on Animals." By Stephen Paget, F.R.C.S., with an Introduction by the Right Hon. The Earl of Cromer, O.M., G.C.M.G., G.C.B. London: H. K. Lewis, 1912.

(*c*) "The Surgical Clinics of Dr. John B. Murphy, M.D., at Mercy Hospital, Chicago." Vol. I., part I., Feb., 1912. Price for year of six numbers (one every second month) 35s.; bound in cloth, 50s. Each number about 130 octavo pages. Philadelphia: W. B. Saunders Company.

SUMMARY OF RECENT MEDICAL LITERATURE, ENGLISH AND FOREIGN.

Specially compiled for The Medical Press and Circular.

Paternal Syphilis.—Marshall (*Brit. Jnl. of Children's Diseases,* May, 1912), sets himself to answer the three following questions :—(1) Is it possible for syphilis to be transmitted from the father to the child by spermatic infection of the ovum? (2) Is it possible for a healthy mother to be infected from a fœtus resulting from spermatic infection of the ovum—*i.e.,* by conceptional syphilis (the *Choc-en-retour* of Diday)? (3) Is it possible for a healthy mother to bear a syphilitic child infected by the father without becoming infected herself? For many years the great majority of syphilologists were contented to answer these questions in the affirmative; but in the year 1903, Matzenauer attempted to prove that the transmission of the disease always took place from the infected mother. Marshall examines the clinical, microbiological, and serological evidence which our present knowledge can bring to bear on the subject, and comes to the following conclusions :—There is not sufficient evidence to justify the renunciation of the doctrine of the paternal transmission of syphilis. This doctrine is strongly supported by clinical evidence, while theoretical considerations are quite as much in favour of it as against it. As Sir Jonathan Hutchinson remarks : " It is a matter of constant experience that the father of a syphilitic infant is known to have had the disease before marriage, whilst not a symptom has ever been observed in his wife. It is improbable in the highest degree that a large number of married women should acquire syphilis in its primary form, pass through its secondary stages, and yet never know it. Yet this is the supposition we must adopt, not once nor twice, but as an everyday occurrence if we reject the belief that a syphilitic father may beget a syphilitic child quite independently of any previous infection of its mother." K.

Non-Surgical Treatment of Exophthalmic Goitre.—Cohen (*Amer. Journ. Med. Sciences,* July, 1912), examines afresh the vexed question of the surgical treatment of this disease. He comes to the conclusion that the Graves' syndrome is a complex disorder, multiple in its variety and ætiology, and obscure in its pathology. The goitre is an incident rather than an essential in the disease, though its presence usually aggravates the symptoms and often adds new ones. The first element in successful treatment is early diagnosis, and where this is made and followed by skilful hygienic and medicinal management, surgery will only become necessary in about five per cent. of the cases treated. Failure to make such diagnosis results in part from the very name given to the disease, since both the goitre and the exophthalmos are usually late symptoms. The most important element in the medicinal treatment is early and prolonged rest, both mental and physical. Such rest must include the removal of all sources of reflex irritation, including the correction of ocular errors which may be the cause of eye-strain. Fresh air, regulation of the diet and active elimination, with occasional symptomatic medication, must be instituted, and continued for a long period. K.

Treatment of Tetanus.—Parker (*Journ. Amer. Med. Assoc.,* June 8th, 1912), advocates the use of the subcutaneous injection of magnesium sulphate in the treatment of this disease, and records three cases successfully so treated. There have been recorded 24 cases in which magnesium sulphate has been used by subarachnoid injection, and four in which it has been used subcutaneously. Among the former 13 patients recovered and 11 died, and among the latter all recovered. The dosage recommended for intraspinal injection is 1 c.c. of a 25 per cent. solution for every 20 lbs. of body weight. The dose given in Parker's cases was considerably larger than this, yet no toxic symptoms followed from it. The three cases treated were acute and severe, but not fulminant, and prompt relaxation resulted from the injections. The magnesium sulphate has no specific action, but by quieting the excessive muscular action it permits the patient to obtain more rest and to take food, and thus supports him, while he is manufacturing his own antitoxin. K.

Concussion of the Spine.—Corner (*Med. Chronicle,* June, 1912), reports some cases of concussion of the spine, by which is meant a more or less complete annihilation of the functions of the cord, immediately subsequent to an injury, temporary in character, and unattended by any discoverable lesion. In one case a man was thrown off his horse on his head. He did not lose consciousness, his mind remaining preternaturally clear. He was paralysed in all four limbs, with corresponding anæsthesia. He lay on the ground for about twenty minutes, until somebody came up and gave him some brandy. Shortly afterwards the paralysis and anæsthesia began to pass off. The total duration of these symptoms was about half an hour. He was very ill for some weeks. Six years later a fracture of the axis was discovered by means of X-rays. In another case, an acrobat received an injury to his neck, which was followed immediately by paralysis and anæsthesia of all four limbs and the trunk. The symptoms cleared up in about twenty minutes, the clearance rapidly following the administration of brandy, so that it would appear that the stimulation of the circulation had something to do with the recovery. The man subsequently recovered completely, and a skiagram showed that he had a fracture of the body and pedicles of the fifth cervical vertebra. The two above cases represented a local concussion. By marginal concussion of the spine, the writer means concussion of the segment of the cord at the margin of the injury. This symptom is often masked and rendered permanent by subsequent hæmorrhage. In another case, a man fell from a height, and on admission to hospital, among other signs, anæsthesia extended up to the third dorsal nerve. Next day feeling had returned as far as the umbilicus—*i.e.,* the region supplied by the eighth dorsal nerve. Autopsy showed fracture-dislocation of the seventh dorsal vertebra, with transverse rupture of the cord. In a fourth case there was total anæsthesia to the second dorsal nerve. In 1½ hours the anæsthesia had cleared to the nipple—*i.e.,* the fifth dorsal nerve. *Post-mortem,* the fifth cervical vertebra was found to be dislocated forward on the sixth. The fifth case was similar to the last. In the sixth case, a man of 73 years was kicked between the shoulders by a horse. There was complete anæsthesia and paralysis of the lower limbs and lower trunk. There was no obvious cause of death found at the *post-mortem.* S.

Myositis Traumatica.—Knapp (*Med. Record,* June 15th, 1912), describes a case illustrating his theory and treatment of a class of patient whose condition is frequently diagnosed as muscular rheumatism. The patient complained of pain which was centred in the dorso-lumbar region of the spine. The pain began some two hours after he went to sleep, became of an excruciating character, and of a severity which prompted the patient to call it cramp. He had to get up and sleep in a chair. During the day the pain eased, notwithstanding heavy work. For seven years he had been treated for various conditions as spinal caries, neuralgia, kidney disease, etc. The patient was cured in four days by applying a plaster and making him sleep on a mattress on the floor. The writer considers that the pain indicates passive traumatism of the muscle, caused by hyper-extension or prolonged extension of the neck, shoulder, or spinal muscles, as the case may be, following faulty posture in bed, whether due to improperly-arranged pillows or the sagging down of a cheap bed-spring. S.

The Treatment of Acute Puerperal Inversion of the Uterus.—Phillips (*Jnl. Obs. and Gyn. Bt. Emp.*, xxi., 3), has collected 184 cases of this condition, chiefly from the English literature. Of these, 23.4 per cent. died. Of 79 cases in which the uterus was immediately replaced in the presence of marked shock, 30 per cent. died. In 11 cases treated at once, no mention is made of shock and all recovered. In 47 cases in which the uterus was not reduced at once, but the condition became chronic and was treated later, all the cases recovered. In 17 cases death occurred with the uterus unreduced; in many of these death occurred from shock or hæmorrhage before the arrival of the doctor reporting the case. The author, from these statistics and his own experience of three cases, advocates that the shock should be combatted first, by saline infusions and injections of pituitary extract and morphia, and then in a few hours, when the patient has rallied, the uterus should be replaced under anæsthesia, at the same time repeating the saline infusion. The delay does not appear to increase the difficulty. In cases where there is no shock, the uterus can be reduced at once. F.

Experimental Poisoning with Chloral Hydrate.—Hopkins (*Amer. Jnl. Obs.*, lxv., 4), from a study of a number of dogs poisoned with chloral hydrate, and examination of the livers and kidneys both of those killed by the poison and those recovered, and also a study of the metabolism as shown by nitrogen excretions both during the action of the drug and afterwards, concludes that chloral hydrate may occasionally produce fatty changes in the liver similar to those produced by small doses of chloroform; that it is impossible to produce necrosis in the liver similar to that found in delayed chloroform poisoning and eclampsia; that chloral produces no histological changes in the kidney, and that it causes an increase in the urinary nitrogen, which may be delayed until after recovery from anæsthesia, and tends to return again to normal. F.

Cornual Pregnancy in the Normal Uterus.—Schumann *Amer. Jnl. Obs.*, lxv., 4), considers the development and diagnosis of this condition, and reports a case. He says that cornual pregnancy may be spontaneously converted into the usual intra-uterine form, and go normally to term, or the sac may rupture with profuse bleeding from the uterine muscles. The diagnosis is difficult, but can usually be made by repeated pelvic examinations. If it is decided to allow the pregnancy to continue, the patient should be kept under the closest observation in case rupture should occur. If it is decided to terminate the pregnancy, approach should be made by the vaginal route, and the abdomen only opened if it is found impossible to deliver by the vagina. If abdominal section is required, the condition should be treated by conservative methods, so as to retain the parts involved after delivery of the contents. F.

Normal Human Blood Serum.—Welch (*Amer. Jnl. Obs.*, lxv., 4), having considered some of the disadvantages and risks entailed by the use of sera of animals, advocates the use of human serum in the treatment of bleeding conditions, especially in operations upon jaundiced patients, and some septic cases. In the latter it is considered that the serum may supply a necessary element to the patient which will enable the system to overcome the infection by means of its own antibodies. Transfusion is considered of value, but accompanied by risk, and should be reserved for cases of marked depletion from prolonged hæmorrhage. F.

Albumin-Reaction of the Sputum.—For some years past there has been considerable debate as to the value of the albumin-reaction in the sputum as a sign of pulmonary tuberculosis. Fullarton (*Glasgow Med. Journ.*, July, 1912) reports a study of the sputa in 100 cases. The method he employed was to dilute some 20 or 30 c.c. of sputum with 50 per cent. of water, to add thereto 10 to 15 drops of dilute acetic acid, and to shake the mixture thoroughly. It was then filtered until a clear fluid was obtained. This fluid was tested for albumin by four methods—heat, nitric acid, 5 per cent. solution of ferrocyanide of potash, and saturated solution of picric acid. The tests were employed as in the ordinary examination of urine. In only 8 per cent. of the phthisical cases was albumin present or inconsiderable in amount, while in 10 per cent. of the controls this was the case. The controls included heart disease, cancer of the stomach, pernicious anæmia, pneumonia, bronchiectasis, acute and chronic bronchitis. Fullarton concludes, *inter alia*, that (1) in the great majority of cases of pulmonary tuberculosis the sputum contains albumin in considerable amount; (2) in acute bronchitis and pneumonia during the febrile stage, in most cases of pneumonia during the stage of resolution, and in bronchiectasis albumin is present in the sputum in considerable amount; (3) the absence of albumin from the sputum suggests a negative diagnosis as regards tuberculosis. R.

Medical News in Brief

University of Oxford.

The following candidates have satisfied the examiners for the Diploma in Ophthalmology:—B. G. S. Acharya, J. McC. Browne, A. B. Cluckie J. N. Daggan, D. V. Giri, W. L. Simpson, and A. E. Verrey.

University of Manchester.

The following degrees were conferred on July 27th:—

Doctor of Medicine.—F. M. Huxley (awarded gold medal), Catherine Chisholm (thesis commended) H. Coppock (thesis commended), Gertrude Hermine Hickling (thesis commended), W. Wilson (thesis commended), C. Hibbert, F. H. Lacey, A. Spong, and F. G. Wrigley.

Master of Surgery.—E. E. Hughes.

Royal College of Physicians of London.

The Murchison Memorial Scholarship, founded in 1880 in memory of Dr. Charles Murchison, has been awarded to Dr. Willam Rees Thomas; and P. Hamill, DSc.Lond., and E. G. Schlesinger, M.B.Lond., have received honourable mention.

Officers and Examiners.—The following Fellows of the College have been elected officers for the ensuing year:—Censors, Seymour J. Sharkey, M.D., S. H. West, M.D., Percy Kidd, M.D., W. Hale White, M.D.; Treasurer, Sir Dyce Duckworth, M.D.; Emeritus Registrar, Edward Liveing; Registrar, J. A. Omerod, M.D.; Harveian Librarian, Norman Moore, M.D.; Library Committee, H. D. Rolleston, L. G. Guthrie, M.D., H. M. Fletcher, M.D., R. H. P. Crawfurd, M.D.; Curators of the Museum, J. M. Bruce, M.D., S. J. Sharkey, M.D., F. W. Andrewes, M.D., W. Hunter, M.D.

The following were elected examiners in the subjects indicated:—Chemistry, J. M. Thomson, F.R.S., H. C. H. Candy, B.Sc.; Physics, A. H. Fison, D.Sc., H. S. Allen, D.Sc.; Practical Pharmacy, E. I. Spriggs, M.D., W. J. Fenton, M.D., A. E. Russell, M.D., A. R. Cushny, M.D., R. B. Wild, M.D.; Physiology, F. Gooch, D.Sc., F.R.S., J. Mellanby, M.D.; Anatomy, C. Addison, M.P., M.D.; Medicine, W. P. Herringham, M.D., R. G. Hebb, M.D., L. E. Shaw, M.D., J. S. Bury, M.D., H. W. G. Mackenzie, M.D., A. F. Voelcker, M.D., C. Ogle, M.D., R. H. P. Crawfurd, M.D., W. J. Harris, M.D., H. B. Shaw, M.D.; Midwifery, C. M. Hanfield-Jones, M.D., A. H. N. Lewers, M.D., A. F. Stabb, M.D., G. H. A. C. Berkeley, M.D., J. S. Fairbairn, M.D.; Diploma in Public Health, H. R. Kenwood, M.B., L. C. Parkes, M.D.; Diploma in Tropical Medicine, F. W. Andrewes, M.D., W. J. R. Simpson, C.M.G., M.D.

New Members.—The following were admitted Members of the College:—E. W. Browne, Captain I.M.S., G. Dansey-Browning, L.R.C.P. and M.R.C.S., Major R.A.M.C., P. Hamill, D.Sc.Lond., L.R.C.P. and M.R.C.S., A. C. Jordan, M.D.Camb., L.R.C.P. and M.R.C.S., J. McPherson, M.B.Glas., Captain I.M.S., B. E. Myers, M.D.Edin., L.R.C.P. and M.R.C.S., H. R. Prentice, L.R.C.P. and M.R.C.S., M. J. Stewart, M.B.Glas., A. W. Stott, L.R.C.P. and M.R.C.S., and W. R. Thomas, M.D.Lond.

Royal College of Surgeons in Ireland.

The following candidates have passed these examinations as undernoted:—

First Dental Examination.—Mr. A. F. Carbery, Mr. G. Dunne, Mr. J. J. Hutton, Mr J. L. Moulang, and Mr. P. J. Polson.

Final Dental Examination.—Mr. A. J. Bodell, Mr. W. P. Bole, Mr. J. T. Hall, Mr. A. W. Mooney, Mr. J. H. O'Neill, and Mr. S. Robinson.

Primary Fellowship Examination.—Mr. J. Ghosh, Mr. E. N. H. Gray, Mr. F. de C. Keogh, Mr. W. T. McCurry, Mr. D. V. O'Connor, Miss Ma Saw Sa, and Mr. W. R. Watson.

Final Fellowship Examination.—Mr. Richard Charles, Mr. Thomas W. Conway, Mr. Wm. Doolin, Mr. J. J. Harty, Mr. G. J. W. Tierney, and Mr. Robert White.

Royal Colleges of Physicians and of Surgeons of Edinburgh and Royal Faculty of Physicians and Surgeons of Glasgow.

The quarterly examinations of the above Board, held in Edinburgh, were concluded on the 23rd inst., with the following results:—

First Examination.—The following candidates passed the first examination:—Ethel M. Popplewell, Alexander W. McGregor, John F. Kerr, Frederick J. Jack, Cecil W. Samwell, Santhosham Swaminathan, John A. Tolmie, Nicholas J. Laubscher, James S. Durward, Frank B. Macaskie, Luckhimoni Ghose, Reginald J. T. Malcolm-Gasper, James V. R. Rohan, and Lizzie O'Flynn; and three passed in Physics and three in Chemistry.

Second Examination. The following passed the second examination:—James Bannerman, William J. F. Craig, Douglas C. M. Page, William Walker, James W. Gordon, William D. Bathgate, Alfred Parker, Yeshwant Narayan Kadam, Stewart N. Toulmin, Percy Milnes, and Frederick A. V. Denning; and four passed in Anatomy and ten passed in Physiology.

Third Examination.—The following passed the third examination:—William C. Fraser, Reginald E. Illingworth, Paul L. Manuel, John M. McLachlan, William A. George, Wilhelm S. Rorich, John B. Aickin, Theunis B. Truter, Kenneth Fraser, John Ross, Jan M. Beyers, Ala Ojo Olaribigbe; and five passed in Pathology and three passed in Materia Medica.

Final Examination.—The following candidates having passed the final examination, were admitted L.R.C.P.E., L.R.C.S.E., L.R.F.P. and S.G.:—Patrick M. Carroll, co. Dublin; Norbert E. Seppelt, South Australia; Cyril M. Willmott, Edinburgh; Thomas R. G. Melrose, Edinburgh; H. W. M. Wallace, Belfast; Devendra Bharadwaja, India; Arthur B. Bull, Cape Colony; Alexander E. Mackenzie, India; Thos. Crawford, Ayrshire; Robert E. Jones, Bangor; James F. Peries, Ceylon; Felix E. Lowe, Jamaica; Gurudas Ram Vohra, Punjab; and two passed in Medicine, five in Surgery, four in Midwifery, and eleven in Medical Jurisprudence.

Royal College of Surgeons of Edinburgh—New Fellows.

At a meeting of the College held July 25th, the following gentlemen, having passed the requisite examinations, on March 29th last, were admitted Fellows:—Bindiganavale Garudachanja Srinivas Acharya, M.B., C.M., Univ. Madras, London, S.E.; Amos W. Bowman, M.B., Ch.B., Univ. Melbourne; Claud J. Brookes, M.B., Ch.B., Univ. St. And.; William F. Buist, M.B., Ch.B., Univ. Edin., L.R.C.S.E. (Triple); Hamilton Drummond, M.B., Ch.B. Univ. Durh.; Gerhard F. Fismer, M.B., Ch.B., Univ. Edin.; Hugo Flecker, M.B., C.M., Univ. Sydney, M.R.C.S.Eng., L.R.C.P.Lond.; Davis Heron, M.B., Ch.B., Univ. Edin., Captain I.M.S.; Herbert Hutson, M.B., Ch.B., M.D., Univ. Edin.; John McIntyre, L.R.C.S.E. (Triple Qual.); Satyendra Nath Mukhopadhyay, L.M. and S., Univ. Calcutta, L.R.C.S.E.; James Murphy, L.R.C.S.E. (Triple Qual.); William Roberts, M.B., Univ. Toronto; John C. Robertson, M.B., C.M., M.D., Univ. Glasg.; Archer Ryland, M.R.C.S.Eng., L.R.C.P.Lond.; Neil C. Scott, M.B., Ch.B., Univ. Glasgow; and George H. Sinclair, M.B., Ch.B., Univ. Edin.

Royal Army Medical Corps.

The War Office last week issued the following list of successful candidates for commissions in the Royal Army Medical Corps at the competition held in London in July, 1912, for which 42 candidates entered:—

R. M. Wright, Bristol Univ., 583; R. B. Price, St. Bart.'s Hosp., 560; J. B. A. Wigmore, Camb. Univ. and St. Thomas's Hosp., 539; *E. C. Lang, Edin. Univ., 530; J. Hare, Durham Univ., 529; E. U. Russell, King's Coll. Hosp., 527; *W. V. Corbett, St. Thomas's Hosp., 523; *R. A. Flood, Dublin Univ., 520; P. M. J. Power, Royal Coll. of Surg., Ireland, 518; *J. L. Huggan, Edin. Univ., 509; *F. C. Cowtan, St. Thomas's Hosp., 505; *C. C. Jones, Birm. Univ., 501; E. V. Whitby, Birm. Univ., 500; G. F. Allison, Queen's Univ., Belfast, and R. E. Porter, London Hosp. (equal), 497; T. H. Balfour, Edin. Univ., 496; *R. B. Phillips, Univ. Coll. Hosp., 496; *R. G. Shaw, Edin. Univ., 494; H. J. S. Shields, Camb. Univ., Middlesex Hosp.; A. L. Urquhart, Edin. Univ., and N. T. Whitehead, St. Thomas's Hosp. (equal), 488; H. F. Panton, Edin. Univ., 486; J. E. Hepper, St. Bart.'s Hosp., A. C. F. Martyn, St. Mary's Hosp., and N. W. Stevens, Edin. Univ. (equal), 485; R. C. Carlyle, Edin. Univ., 471; *L. T. Poole, Edin. Univ., 464; *A. A. M. Davies, Oxford Univ., Westminster Hosp., 463; L. Dunbar, Leeds Univ., 432; *J. C. Sproule, Royal Coll. Surg., Ireland, 429.

*These gentlemen, being in possession of certificates obtained in the Officers Training Corps, were awarded service marks under Paragraph 74 of the Regulations for the Officers Training Corps.

Indian Medical Service.

The result of the competition for commissions in the Indian Medical Service, which was held last week, is as follows:—

J. D. Wilson, M.A., M.B., Ch.B.Edin., 3,718; L. A. P. Anderson, B.A., B.C., Camb. Univ. and St. George's Hosp., 3,519; W. C. Paton, M.A., M.B., Ch.B.Edin., 3,481; J. B. Hance, B.A., M.B., B.C., M.R.C.S., L.R.C.P., Camb. Univ and Guy's Hosp., 3,389; S. Gordon, B.A., B.C., M.R.C.S., L.R.C.P., Camb. Univ. and London Hosp., 3,316; G. Y. Thomson, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Guy's Hosp., 3,274; H. K. Rowntree, M.B., B.S.Lond., L.M.S.S.A., Middlesex Hosp., 3,268; B. F. Eminson, M.B., B.S.Lond., Charing Cross Hosp., 3,216; A. Kennedy, B.A., B.C., M.R.C.S., L.R.C.P., Camb. Univ. and Middlesex Hosp., 3,186; J. C. John, B.A., M.B., B.C., M.R.C.S., L.R.C.P., Camb. Univ. and St. Bart.'s Hosp., 3,172; S. D. Ratnagar, B.A., L.M. and S., L.R.C.P. and S.Edin., L.F.P. and S.Glas., London Hosp., 3,157; C. McIver, M.R.C.S., L.R.C.P., Univ. Coll. Hosp., 3,068.

NEW PREPARATIONS.

REGULIN BISCUITS.

We have called attention on a previous occasion to the value of regulin as a useful vegetable aperient causing a natural and gentle action of the bowels. From the Regulin Syndicate Ltd., 15, Cullum Street, E.C., come some attractive biscuits which contain a larger percentage of regulin than the tablets. They are oval in shape and flavoured with vanilla, and are specially recommended for invalids and young children of weak and delicate constitution. The price of a box of 20 biscuits is 1s. 6d. Children may take a couple or more, and adults four or five, or more, as prescribed.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

THE MEDICAL DIRECTORY.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The annual circular for the "Medical Directory" will be posted to the profession on August 1st. We sincerely hope that all practitioners will make their returns to us as quickly as possible, so that the issue for 1913 may be accurate and full of the latest information.

We shall, as usual, publish a few days before Christmas, and we seek the hearty co-operation of the profession in making this effort.—Your obedient servants,

J. and A. CHURCHILL.

7, Great Marlborough Street, London, W.
July 27, 1912.

X. (Hove).—In reply to your enquiry, an aeroplane can mount 4,000 to 5,000 feet, *i.e.*, from three-quarters to one mile. Taking the curve of the earth's surface (which is known), it is easy to calculate the superficies that will be visible. The detection of a fleet 2,500 miles distant from this or any other height would appear to be an impossibility, the statement of Co. Seely notwithstanding.

L. B. L. (Birmingham).—The specific terms of the contract render the reply in the negative unavoidable.

MORE SUO.—We have made inquiries and have ascertained that the book has been out of print for several years.

A. S. S.—Courtesy would demand that a visit should be made, with or without a letter of introduction.

ANOTHER HOME SPA.

The discovery is reported of a medicinal spring at Purton, near Swindon, whose waters are said to possess valuable therapeutic properties. According to an analysis by Dr. Voelcker the Purton water contains iodide of sodium, bromide of magnesium, sulphate of soda, sulphate of magnesia, sulphate of lime, sulphate of potash, carbonate of potash, chloride of sodium, oxide of iron and alumina, with traces of phosphoric acid, soluble silica, making a total solid residue of 348.728 grains to the Imperial gallon, together with 50.4 of free carbonic acid and a trace of sulphuretted hydrogen.

M.B.M.A.—The Royal Society of Medicine is now an assured success. To relieve any doubt upon that point, our correspondent would do well to pay a visit of inspection to the Society's new home, Wimpole Street, W. He will be courteously received, and will, we doubt not, be impressed by what is shown him.

DR. R. R. R. (Liverpool).—The report on Tuberculosis referred to in our issue of the 24th inst., is published as a Parliamentary Paper and may be obtained through any official stationer or bookseller.

Appointments.

BARKER, L. E. H. R., M.B., B.S.Cantab., School Medical Inspector under the Lancashire County Council.

BOYD, SIDNEY ARTHUR, M.S.Lond., F.R.C.S.Eng., Surgeon to Out-patients at the Hampstead General and North-West London Hospital.

BROOK, ELIZABETH H., M.B., B.S.Edin., School Medical Inspector under the Lancashire County Council.

DRYSDALE, J. H., M.B., B.C.Cantab., Non-obstetric Physician to Queen Charlotte's Lying-in Hospital.

EDMOND, W. S., F.R.C.S.Eng., Surgeon to X-Ray Department of the Salop Infirmary.

GASH, T., M.B., B.S.R.U.I., Certifying Surgeon under the Factory and Workshop Acts for the Snodland District of the county of Kent.

MACGREGOR, D., M.D.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Jedburgh District of the county of Roxburgh.

MAXWELL, R. D., M.D.Lond., Physician to In-patients at Queen Charlotte's Lying-in Hospital.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Garforth (Yorks), Sheerness (Kent).

Royal Isle of Wight County Hospital, Ryde.—Resident House Surgeon. Salary £100 a year. Applications to the Secretary.

Whitehaven and West Cumberland Infirmary.—Resident House Surgeon. Salary £120 a year, with board and lodging. Applications to Wm. H. Sands, Secretary.

Staffordshire County Asylum, Stafford.—Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board and washing. Applications to the Medical Superintendent.

Brixton Dispensary, Water Lane, S.W.—Resident Medical Officer. Salary £175 per annum, with furnished apartments, attendance, coal and gas. Applications to W. Halliday, Secretary.

Macclesfield General Infirmary.—Senior House Surgeon. Salary £100 per annum, with board and residence. Applications to the Chairman of the House Committee.

York County Hospital.—House Surgeon. Salary £100 per annum, with board, residence, etc. Applications to Fredk. Neden, Secretary and Manager.

Births.

GUNN.—On July 26th, at Calf Hall, Consett, the wife of George Gunn, M.D., Neston, Cheshire, of a son.

MASON.—On July 25th, at 49, George Street, Portman Square, the wife of George A. Mason, M.A., M.B., B.C.Cantab., of a daughter.

MOON.—On June 27th, at West Orange, N.J., U.S., the wife of Dr. James F. Moon, of a son.

PRINGLE.—On July 22nd, at 153, Withington-road, Manchester, the wife of Dr. John Pringle, of a son.

RIDOUT.—On July 27th, at Southsea, Hants, to the wife of C. A. Scott Ridout, M.S., M.B.Lond., F.R.C.Eng.—a son.

SCOTT.—On July 26th, at 130, Harley Street, the wife of Mr. Sydney Scott, of a daughter.

STOTT.—On July 28th, at 24, Addison Road North, W., the wife of Arnold W. Stott, M.A., L.R.C.P., of a daughter.

WHEELER.—On July 24th, at 32, Monkstown Road, Co. Dublin, the wife of Dr. Robert De Courcy Wheeler, of a daughter.

WILD.—On July 26th, at Aspinall House, Prescot, the wife of Charles H. Wild, M.R.C.S., L.R.C.P., of a daughter.

WILKINSON.—On July 19th, at Mansfield Lodge, Simla, the wife of Lt.-Colonel E. Wilkinson, I.M.S., of a daughter.

Marriages.

ATHERTON—STOPFORD-TAYLOR.—On July 24th, at St. Hildeburgh's, Hoylake, Alfred Edward, second son of George Atherton, Esq., Rose Hill, Aughton, and The Firs, Windermere, to Victoria Elsie, only daughter of Dr. Stopford-Taylor, Rodney Street, Liverpool, and Standishgate, Hoylake.

MAYER—DOUGLAS.—On July 27, at Christ Church, Hornsey, by the Rev. C. J. Sharp, M.A., Wm. Lewin Mayer, L.R.C.P., M.R.C.S., L.M., to Bessie Douglas, only daughter of George Banks, J.P., of Broughton, Hants.

VERCOE—SKINNER.—On July 25th, at the Parish Church, Wimbledon, Richard Herbert, M.R.C.S., son of the late Richard Vercoe, of Bodmin, to Elizabeth (Celie) second daughter of the late Charles Pickard Skinner, Staff Paymaster, Royal Navy, and of Mrs. Skinner, of Queen Alexandra Court, Wimbledon.

WENHAM—ANGUS.—On July 25th, at Heath Street Chapel, Hampstead, Herbert Victor Wenham, M.B., F.R.C.S., of the Union Medical College, Peking, second son of Arthur Wenham, of 11, Beauchamp Avenue, Leamington, to Margaret Elizabeth Angus, only daughter of Charles J. Angus, of 22, Church Row, Hampstead.

WIGRAM—EDWARDS.—On July 23rd, at St. Peter's, Great Haseley, Loftus Edward Wigram, M.B., youngest son of the late Prebendary F. E. Wigram, to Constance Emma Letitia Edwards, youngest daughter of the Rev. W. Gilbert Edwards, Rector of the Parish.

Deaths.

ADAMSON.—On July 23rd, at Labuan, Straits Settlements, Robert Edward Adamson, M.D., son of the late Alexander Rattray Adamson, M.D., of Cirencester, aged 44.

APPEL.—On July 22nd, at Madanapalla, Madras Presidency, Dr. Elizabeth Louise Catharine Appel (Dr. Louise), B.Sc., B.M., B.S.Lond., on the anniversary of the death of her brother, Chas. Willm. Ernest, of the Livingstone-Congo Inland Mission.

CARRUTHERS.—On July 22nd, at Halton House, Runcorn, very suddenly, William Hodgson Carruthers, M.D., F.R.M.S.

CROCKER.—On July 20th, at The Mount, Wellington, Somerset, after a short illness, Jonathan Crocker, M.R.C.S., late of Stogumber, aged 87.

DAY.—On July 22nd, at Westcroft Square, Hammersmith, Albert Bryan Day, M.R.C.S., L.S.A., late of Isleworth, Middlesex, aged 80.

GRABHAM.—On July 23rd, at Martyns, Witham, Essex, George Wallington Grabham, M.D.Lond., aged 75.

GREAVES.—On July 7th, at Barbados, West Indies, Herbert Stanley Greaves, B.A., M.R.C.S.,Eng., L.R.C.P.Lond., only surviving son of the Rev. Canon and Mrs. Greaves, aged 38.

WALSH.—July 20th, 1912, at Clogheen, Margaret Legros Walsh, beloved wife of Dr. W. P. Walsh, as the result of an accident.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, AUGUST 7, 1912. No. 6.

NOTES AND COMMENTS.

The Tale of the Tub.

JUDGING from the result of Dr. R. H. Quine's inquiry into the use of the bath by hotel and lodging-house visitors, it would seem almost as though the famous dictum once expressed by an eminent member of the medical profession regarding the use of soap were being seriously taken to heart by the public. There is no doubt that the daily bath habit is, for the great majority of individuals, simply a counsel of perfection, unless it has been formed in early childhood and has become a second nature. Climatic considerations, lack of time and opportunity, all more or less legitimate excuses, are among the chief causes of the failure to practise total daily ablution. Moreover, the accommodation provided in the average house is not sufficiently tempting or commodious to induce a semi-reluctant or half-awakened person to take a plunge into cold water, which, if regularly indulged in, would act as an excellent tonic, and also as a good prophylactic against cold-catching. The more limited sphere of the wash-hand basin is, consequently, preferred by approximately forty millions of our fellow creatures in the British Isles. It is assumed too often that habits of personal uncleanliness are confined to the poorer classes, but an investigation of this character serves to show that a greater reform is needed in the direction of providing increased bathing and washing facilities for domestic use for all sections of the community.

The Home Cultivation of Drugs.

THE President of the British Pharmaceutical Conference, Sir Edward Evans, in the course of his address delivered at the Edinburgh meeting last week, alluded to the fact that the Government of the United States have a bureau of plant industry connected with the Department of Agriculture. He threw out the suggestion that certain plants and herbs used in medicine might be cultivated on the large scale in our own country under the auspices of the Board of Agriculture, and he pointed out that British soil seemed specially adapted for this purpose. It is well known that home-grown digitalis, henbane, colchicum and valerian, among other common medicinal plants, are equal, if not superior, to any produced elsewhere. In a paper read before the conference by Mr. J. H. E. Evans, nephew of the President, the fact is stated that there is as great a demand as ever for the old domestic remedies, such as cascara, podophyllin, etc., so that there would appear to be sufficient selection of material for the cultivator. Private enterprise has done a good deal in this direction, but there would seem to be a distinct opening for the cultivation of another home industry, which the Government might be well advised to supervise and control. Meanwhile small holders must be content to grow aconite and belladonna under the shade of their own fig tree.

The Income of the "B.M.J."

THE issue of an appeal to the public for support by the British Medical Association does not at first sight strike one as a dignified proceeding, although there may, of course, be much more justification for such a course than that which appears on the surface. It is not altogether clear why the Association should be in want of money, since it enjoys a princely income from a journal having an unrivalled circulation amongst medical men. Were the journal in private hands it would undoubtedly be made to yield a handsome fortune to its proprietors within a few years. There is no apparent reason why it should not yield a similar harvest to its present owners. In saying this we have not the least wish to criticise the editorial management, which is clearly not responsible for extravagance or otherwise in purely business management. Our argument is simply that under private management a similar enterprise would yield a large available yearly profit. Were the right of annual general meeting restored to members there would be a better opportunity of drawing attention effectually to this and other important matters of administration.

A Strikers' Fund.

ONE of the curious phases of latter-day humanity is the attitude of society towards the labour strikers in London. As the result of the collective action taken by the dock labourers and allied industries many thousands of men have been out of work for several months. The society funds available for their relief have been long since exhausted and a vast amount of suffering has been inflicted upon the strikers and their families. Hitherto an organised common action of this kind has been undertaken by the labourers concerned, who have had to bear upon their own shoulders any resulting inconvenience or disaster. In the present conflict between capital and labour the position has been reversed, for society has come to the rescue with overflowing subscription lists in favour of the starving families of the strikers. That is to say—reducing the matter to the terms of simple statement—that the strike is being maintained by the subscriptions of philanthropists and no longer by the personal sacrifice of workers anxious to improve their financial position at all costs!

The Noble Sport of Otter Hunting.

IT were well for the fervid cult of anti-vivisectionists — as we have often pointed out in these columns—were they to turn their attention to the degrading and revolting cruelty involved in many kinds of so-called "sport." For the mere purpose of relieving the tedium of a life that is not overburdened with intellectual interests, the country gentleman, aided by his town cousins who can afford a sufficiency of time and money, amuses himself from time to time with highly organised and costly expeditions with the object of killing hares, foxes, otters, deer, pigeons and other creatures. Of all these countryside barbarities it is difficult to conceive any more barbarous than that devoted to the chase of the otter. The strength, fierceness and tenacity of life possessed by that animal enables it to fight for life often for many hours at a stretch, and its fighting prowess is shown by the mutilation or death of various dogs of the pack. From the point of view of dying "game"—that is to say, of putting up a stubborn and resourceful fight—the otter is a godsend to the country sportsman, but it is bound to die in the long run when beset with overwhelming odds by hounds and hunters.

Why not Regulate Sport ?

A RECENT account of such a hunt relates how at one point the otter was being killed by the hounds, when two of the huntsmen rushed into the water and literally dragged their quarry from the jaws of the pack. In the struggle the poor animal's back was broken. The witness of the incident thought, naturally enough, that the huntsmen were going to put an end to the otter's sufferings, but their intervention was merely with a view to prolong the amusement. The otter, in spite of its paralysed hind quarters, fought some while longer with the fore part of its body, much to the delight, doubtless, of the men and women who had gone to so much trouble and expense in order to end his existence. We wonder if any antivivisectionists were amongst them, and, if so, whether it occurred to them to apply the test of motive to the common object of their gathering. In any case, it seems not a little inconsistent that the community which legislates for the protection of the lower animals against experiment, conducted with the view of alleviating the maladies of man, should tolerate all kinds of atrocity inflicted in the name of sport.

LEADING ARTICLES.

CELLULOID DANGERS AND THE HOME OFFICE.

LAST week witnessed an important inquest in the City of London upon the bodies of eight girls who died as the result of a fire upon the top floor of a building in the heart of the City. The place was used as a factory, and the business carried on there consisted chiefly of the manufacture of celluloid Christmas cards. There were two rooms, and all the workpeople in the front room escaped by the main staircase and were joined by two of the girls in the back room, but the rest in that part of the premises were cut off by the flames, which spread with extraordinary rapidity. The unfortunate young women rushed up a special staircase exit to the roof, but the flames had already burst through the skylights, and the only way open was to the back of the building, a projecting block with a sheer drop of fifty or sixty feet on all sides. One or two of the girls were able to escape by means of a plank; some jumped or fell down to the glass office roof below, and of these one escaped with little injury, and one is still alive. The rest were burnt on the roof. The occurrence has been fully investigated by the Coroner, Dr. F. J. Waldo, not only as regards the deaths, but also as to the cause of the fire and the prevention of similar occurrences in the future. During ten years of office the Coroner has investigated about a score of deaths from celluloid fires, so that it is time something were done. The circumstances of the present fire reveal gross and culpable negligence. The fire was caused by a boy sealing a packet of celluloid sheets by sealing-wax lighted at a gas-ring jet. This proceeding would be little more dangerous if it were carried out in a firework factory. There were about 1,000 lbs. of celluloid stores on the premises, and a few minutes sufficed to gut the place and destroy the eight girls. There were no regulations whatever as regards precaution in handling the celluloid. There were no fire drills, the employees had no special warning, there was no fireproof storage, no appliances for extinguishing fire. On the other hand, there were a number of naked lights, live gas stoves used for cooking purposes, and a sealing-wax jet. As regards fire exits, the London County Council did their duty, and after some litigation compelled the owners to furnish adequate exits. There the matter ended, for it seems to have been the duty of no one to see that the fire exits were maintained in proper order. The Home Office, in a letter to the London County Council, signed by a Secretary of State, accepted full responsibility for the safety of the workpeople in this particular factory. The way in which that control has been administered is a revelation as to the slothfulness and absolute inefficiency of Home Office methods. It was admitted in evidence that no register of celluloid factories was in existence, and that the one where the fire occurred, one of the largest in London, was simply described as a Christmas-card manufactory. The Home Office has published an excellent set of draft regulations by the chief inspector, Dr. Whitelegge, for distribution amongst celluloid factories, but no copy of this appears to have reached either the head of the firm or his manager, nor was it ever brought to their notice by any of the factory inspectors on the occasion of their exceedingly rare visits to the premises, in spite of the fact that reckless laxity must have been apparent to a mere tyro in such matters. Needless to say, Dr. Whitelegge's memorandum would carry nothing but a moral advisory weight, but in the present instance the firm was willing and anxious to carry out everything desirable for the safety of their employees. The gross and inept failure of the Home Office to discharge its elementary functions under the Factory Act has been demonstrated by the recent tragedy in the City, and it is to be hoped that the Home Office will agitate for statutory powers instead of their present useless permissive functions. The jury urged the desirability of a Royal Commission of Enquiry into the whole subject of fatal fires, and the relation of the various authorities to the prevention of fires—a step that, if adopted, would open the eyes of the public as to the need of businesslike methods in some at least of our Governmental departments.

THE SURGERY OF MALIGNANT DISEASE OF THE LARGE INTESTINE.

The value of a well-timed operation for the relief of cancer of the lower portion of the intestinal tract and the pain and suffering due to cancer is especially evident when that disease attacks the large intestine. Many years of useful life may be granted by a judicious colotomy, for instance, and the patient may even be enabled to take part in public and social life with a very fair degree of comfort and satisfaction. The personal experiences of one who has devoted much attention to this special branch of operative surgery must be regarded as of more value than many text-books, and therefore the remarks made by Mr. T. F. Paul, in his address in surgery, delivered before the British Medical Association at the Liverpool meeting, a full abstract of which we publish this week in our columns, are worthy of the most earnest attention. An address of this kind, embodying the results of a long practical experience, and coming from one who, by virtue of his position, is pre-eminently qualified to judge of the merits and drawbacks of the various operative procedures, cannot fail to be of the greatest service to those whose opportunities are, necessarily, more limited. It will, doubtless, come as a surprise to many to learn that Mr. Paul is firmly convinced that the spontaneous cure of cancer of the colon does actually occur, especially after a colotomy has been performed, and, further, that occasionally no recurrence has taken place when a malignant growth in this situation has been incompletely removed. The varying degrees of malignancy, it was pointed out, have an important practical bearing upon the question of prognosis. Thus, the colloid type of cancer is the most malignant, the hard, schirrous form moderately so, while the soft, fungating variety is the least. Happily, the last-named is the kind most frequently seen, especially in the cæcum and rectum. The operation of colotomy itself is practically free from danger, except in the old and feeble, and when a satisfactory surgical result has been obtained "it only needs a little pluck and a desire to make the best of a disadvantage for any ordinary patient to continue to lead a useful life." Short-circuiting is less objectionable to the patient than colotomy, and whenever possible this is the operation of choice, but the fact remains that a colotomy is almost always necessary for inoperable rectal cancer, for grave obstruction, and for certain forms of colonic ulceration. Excision of the growth itself is to be desired when circumstances permit, and it is interesting to note that the advantages of the glass tube method, described by Mr. Paul in 1892, still appeal to him and to many other operators. As carried out by the originator, the operation takes quite two months to complete, and it is about three months before patients are able to resume their work. With regard to excision of the rectum for malignant disease, a preliminary colotomy is advised in all the more serious cases, for it greatly lessens the risks of total resection. The retention of a portion of healthy bowel in the old situation is considered injudicious, as better results are generally obtained by making a new exit beside the sacrum. Much profit will be gathered from a careful perusal of this address, which reflects in every paragraph the learning and experience of its distinguished author.

CURRENT TOPICS.

The Admission of Laymen to Medical Debates.

In the report of the scientific work of the annual meeting of the British Medical Association at Liverpool, to be found elsewhere in our columns, it will be observed that one of the sections, that of Tropical Medicine, invited the attendance of representatives of large business firms having offices in the City to be present at one of the debates. The subject down for discussion was that of the sanitation of agricultural estates in the Tropics. The plan of admitting prominent laymen to medical meetings of this kind has been tried on previous occasions when matters of industrial importance have been discussed. There can be no objection whatever to the presence of the heads of large firms and manufacturing concerns at medical discussions when topics closely affecting the health of their employees and the general hygienic aspect of the work done are under consideration. Such individuals would not only derive benefit from hearing the discussion on the scientific side of their particular trade or industry, but their co-operation in health matters would be the more readily enlisted as the result of a combined conference of this sort. It has become quite common to invite some distinguished layman to deliver the opening address at a public health congress, for instance, and, indeed, a great conference on hygiene would be considered incomplete without the presence of some lay official. The Section of Tropical Medicine may therefore be congratulated upon the wisdom of its policy in this direction.

The Expansion of the Royal Society of Medicine.

It is understood that the Council of the Royal Society of Medicine has decided to form additional Sections of Ophthalmology and Tropical Medicine, and it is anticipated that both of these new extensions will be ready for work by the beginning of the winter session. There is no reason why every single branch of medical science should not be represented at No. 1 Wimpole Street as a component part of the now greatest Society for the advancement of medical learning existing in the metropolis. Many reasons have been given in the past why certain societies have preferred to hold aloof, perhaps the favourite one being a fear lest the individuality pertaining to the old society should be lost by becoming merged in the larger body. This, however, is a purely specious argument, for a certain amount of freedom, nay, even laxity, is allowed to the various sections, whereby each is at liberty, to some extent, to frame its own by-laws and to impose restrictions as to membership. It is only right that the sectional councils should have a free hand in matters of self-government, but, at the same time, it is the Council of the whole Society which is responsible for the harmonious working of all its constituent parts. Too much liberty in this direction is to be deprecated, for it may easily be taken advantage of by exclusivists and corner-promoters. The more catholic and liberal-minded the regulations for the control of each section the better for the cause of general medical science. Actuated by these principles, we look forward to the time when there will be no need for any other medical societies, special or general—save the purely local ones—for all interests will then be embraced and absorbed by the Royal Society of Medicine.

Dr. G. E. Morrison's Chinese Appointment.

Most serious students of Chinese contemporary history have known that for many years the *Times* has been represented in Peking by a correspondent whose knowledge and ability have made him the leading authority on his subject throughout the world. Few medical men have, however, been aware that the gentleman in question, Dr. G. E. Morrison, is a member of the profession. He is an Australian by birth, and a graduate—M.B., C.M., 1887—of Edinburgh University. Within the last few days it has been announced that Dr. Morrison has been appointed political adviser to the Chinese Government. This appointment is a new creation. It will put Dr. Morrison in a position of great authority, and if, as seems likely, he will be provided with a staff of highly-qualified foreigners, he may be able to influence greatly, or even to direct the home and external policy of the empire to a happy issue at a time when it so sorely needs steady and enlightened guidance. The *Times* gives a sketch of Dr. Morrison's career. At the age of twenty he undertook a pioneer expedition to New Guinea, where he was wounded by two native spears. One of the spear-heads remained in his body for nine months, when it was extracted by Professor Cheyne at Edinburgh. The next few years saw him wandering and practising in the United States, the West Indies, Spain, Morocco, Paris, Australia, and ultimately in the Far East. His famous walk in 1882 across Australia, from Normanton to Victoria, a distance of 2,043 miles, was rivalled in 1894 by his 3,000-mile trip from Shanghai to Rangoon. In 1896 he travelled in Indo-China, and the following year he crossed Manchuria from Stretensk to Vladivostok. The part that he played in 1900 during the siege of the Legations in Peking is on record, as, too, are his services during the years that preceded the Boxer outbreak. His work in connection with the events which led up to the end of the Manchu Dynasty is within recent memory.

The Domiciliary Treatment of Tuberculosis.

The Local Government Board have just issued an Order (No. 59,221) which they have made prescribing the manner of domiciliary treatment of insured persons suffering from tuberculosis, of which they approve for the purpose of Section 16 (1) (b) of the National Insurance Act, 1911. It is assumed that when the machinery for combating the disease in a district is complete, according to the recommendations of the Departmental Committee on Tuberculosis, a dispensary with an expert consulting officer will be available in every area as part of the general public health organisation. The Order provides that the consulting officer means the consulting officer of a dispensary approved by the Board, who may be the medical officer of health for the district or any other medical practitioner. The actual treatment shall be carried out under the care and direction of a registered medical practitioner, subject to certain conditions, among which it is laid down that the patient is to be attended by such a medical practitioner at such intervals as may be necessary and that he shall receive from him instructions as to his mode of living, diet, rest and work, and as to precautions against re-infection. A card or sheet is set forth in an appended schedule upon which a continuous record of the patient's condition and progress is to be kept, in addition to the clinical history and particulars of the treatment employed. The medical practitioner is to report to the consulting officer from time to time, as specified, upon the progress of the patient and to give other details as required. The regulations are dated July 26th, 1912, and are applicable to England and Wales.

Eugenics.

The wide realisation of our responsibility to posterity is a clear indication that selfishness and crude commercialism are far from dominating the public mind of to-day. It is true altruism to sacrifice present gain for the benefit of a future race. All thinking individuals are agreed that something should be done, but in methods of performance we are at variance. All hope for the future has its root in the past, and the first essential in making plans for future progress is a knowledge of the past. In some states of America, where money is always forthcoming, persons have been appointed whose duty is to visit the asylums for the insane, obtain the home addresses of a certain number of inmates and then visit the families of the latter. Working in conjunction with the local doctor, they then proceed to find out the histories of these families to as many generations as possible, paying particular attention to mental defects displayed by any of the progenitors. Some of these visitors are of high social position and find this occupation of the greatest interest. We remember asking one young and attractive lady if she had been able to discover anything of importance during the short time she had been engaged in this work. She replied that she had started on the case of an insane criminal who had been a prostitute, and on tracing back her family she had found that the female members of it had been prostitutes with criminal tendencies for five generations. Such retrospective human analysis seems to be the only rational manner of establishing a satisfactory system for work in the present. The American public seems to take the subject much more seriously than we do in this country, though the difficulties of tracing families in a new country is infinitely greater than in our own.

The "Medical Who's Who," 1912.

When we received a prospectus, some few months ago, of a proposed new directory of medical men on novel lines, we then expressed the hope that it would be possible to make it a comprehensive list of every duly qualified practitioner. The "Medical Who's Who" for 1912 has now appeared as an attractive red volume about half the thickness of the ordinary "Who's Who." It is anything but a representative list, but, as the publishers, the London and Counties Press Association, Ltd., state in their preface, all medical practitioners on the Register in Great Britain have been invited to furnish particulars of themselves, and it must be, therefore, due either to natural modesty or to apathy that the list is incomplete. Many names have, unfortunately, been received too late for insertion in the present issue, but it is hoped that the volume will be published in March of each year, and that the next one will be far more representative of the entire profession. The surnames are printed in heavy capital type, so that a given name can be turned up quickly, and the biographical details, so far as we have tested them, are plainly set forth, these being for the most part more intelligible than those often found in similar lists. If we may offer one criticism, we may suggest that no names of scientists, however distinguished, possessing no medical qualifications, should appear in the next edition. The book will prove to be, however, a valuable work of reference, and it deserves the cordial support of every member of the medical profession.

Obscene Advertisements.

At the last meeting of the Select Committee on quack medicines prior to the recess Lt.-Col. H. Everitt, one of the hon. secretaries to the White Cross League, gave evidence as to the advertisements of drugs and appliances for preventing conception, and for procuring miscarriage or abortion. He pointed out that a joint committee of both Houses of Parliament, appointed in 1908 to inquire into this question, had recommended legislation to prevent the sale and advertisements of these articles, and he urged that legislation should be no longer delayed. His society only referred to such matters as were outside the authority of the medical profession. They did not as laymen offer any opinion that affected the discretion of medical men in dealing with these matters. They recognised, for instance, that there were cases in which the life of a mother might be endangered by another birth. Col. Everitt strove to show that in the absence of such legislation as the Joint Committee of 1908 had recommended, the evils condemned continued and would go from bad to worse. He submitted copies of provincial and other papers to date containing obscene advertisements, and also circulars sent to women whose marriages and confinements were announced in the papers. In reply to questions, Col. Everitt submitted reports of twenty-one matrons of Rescue Homes on the use by, and effects upon, unmarried girls under their care; also evidence of the moral and physical injury consequent upon the knowledge by unmarried men and women of the use of preventives as a facility for illicit intercourse without detection. The enormous sums spent upon advertising are evidence of the extent to which these goods are employed. An equally large sum is annually expended upon the advertising of "ladies' remedies"—merely sham abortifacients. It is not only in inferior provincial prints that these shameful announcements appear. They are to be found in many papers that base themselves upon morality, piety and religion, and till lately were printed literally by the score in a London weekly paper circulating widely among working men and the lower classes.

PERSONAL.

We deeply regret to announce the death, after a severe operation, of Mr. Arthur Trehern Norton, C.B., F.R.C.S., one of the proprietors of the Medical Press and Circular. An obituary notice will be found elsewhere in our columns.

H.M. the King visited the King Edward VII. Sanatorium at Midhurst last week, being received by Sir Frederick Treves (Chairman), Dr. P. Hartley, and other members of the Council and Resident Staff.

Capt. M. W. Falkner, R.A.M.C., has been appointed a Specialist in Operative Surgery.

Dr. W. S. Lazarus-Barlow has been admitted to the Faculty of Medicine of the University of London.

Dr. A. E. Evans has been appointed Assistant Medical Officer of Health for the County of Flintshire.

Dr. G. P. Yule, M.D., B.Sc. (Public Health), F.R.C.P.E., has been appointed County Medical Officer for Fifeshire.

Dr. J. K. Mouat, M.A.Oxon., M.B., Ch.B.Bristol, has been appointed Demonstrator in Pathology at the University of Bristol.

Dr. F. Hall, M.B., Ch.B.Vict., D.P.H.Manch., has been appointed Assistant Medical Officer of Health of the Borough of Derby.

Mr. L. A. Dunn, M.S., F.R.C.S., has been re-elected a Member of the Court of Examiners of the Royal College of Surgeons of England.

Dr. C. M. Hinds Howell, M.D.Oxon., F.R.C.P., Lond., has been appointed Assistant Physician to Outpatients at the National Hospital, Queen's Square, W.C.

Mr. E. F. Finch, M.D., F.R.C.S., and Mr. P. A. Reckless, F.R.C.S., have been appointed Honorary Demonstrators of Anatomy in the University of Sheffield.

Sir Henry Morris, Bart., F.R.C.S., has been appointed Visitor to the Examinations of the Egyptian Medical School for the examinations to be held in December.

Dr. Robert N. Paton, Medical Officer of H.M. Prison, Wormwood Scrubs, has been appointed Governor of Holloway Gaol, in succession to Dr. James Scott, who has retired through ill-health.

Mr. S. W. Daw, M.B., B.S., F.R.C.S., recently Resident Surgical Officer at the General Infirmary, has been appointed Surgical Tutor to Leeds University and Surgical Registrar to the Leeds General Infirmary.

Dr. J. Neal, formerly Secretary of the Birmingham General Practitioners' Union, has been appointed Deputy Medical Secretary to the British Medical Association in succession to Dr. Cox, the new Medical Secretary of the Association.

Dr. W. Ainslie Hollis, M.A., M.D., F.R.C.P., Consulting Physician to the Sussex County Hospital, Brighton, is the President-elect of the British Medical Association, the annual meeting of which will therefore take place in Brighton in 1913.

Dr. H. E. Armstrong, M.O.H. for Newcastle, is resigning that position after a service of 39 years, owing to advancing age. At a recent meeting of the Sanitary Committee of the Corporation the Chairman (Sir Henry Newton) paid a high tribute to the good work accomplished by Dr. Armstrong, and wished him long life and happiness in his retirement. In these sentiments we cordially desire to be allowed to share.

FRENCH CLINICAL LECTURE
ON
DIGESTIVE URÆMIA SIMULATING CANCER OF THE PYLORUS.

By M. CASTAIGNE, M.D.,

Professor at the Faculty of Medicine of Paris; Physician to the Beaujon Hospital.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

GENTLEMEN,—In dealing with patients suffering from digestive troubles you may sometimes find it very difficult to discover the underlying cause, the *primum movens*, of the gastro-intestinal disturbances. In some instances these may be due exclusively to concomitant chronic nephritis, and if this be overlooked you expose yourselves to serious errors of interpretation and treatment.

The relationship between renal affections and digestive troubles is far too complex to admit of its bearings being discussed within the limits of one lecture, and to-day I shall limit my remarks to a short chapter in this relationship. I shall discuss gastric symptoms simulating cancer of the stomach, which are under the dependence of a renal lesion, and I will relate to you various cases which will enable us to lay down the grand lines of diagnosis and treatment of these digestive manifestations, such treatment being diametrically opposed to what would be indicated in presence of a gastric neoplasm.

The first case is that of a woman, 42 years of age, who, for several months before admission to hospital, complained of loss of appetite, especially in respect of meat, and vomiting, which was watery in the morning and alimentary later in the day. When the vomit was particularly copious one could identify particles of food taken two or three days previously. Under these conditions she naturally became progressively emaciated.

One day after an attack of vomiting she passed blood *per rectum*, and this seemed to establish the diagnosis of malignant stenosis of the pylorus, so she was sent into hospital.

There the diagnosis was confirmed after a few days' observation, and in presence of the obstinate vomiting and the intestinal hæmorrhage, gastro-enterostomy was performed, but the patient died under chloroform.

I assisted at the post-mortem examination, which showed the absence of any gastric or intestinal cancer, revealing on the other hand the existence of chronic nephritis as shown by the fibrous state of both kidneys, one of which weighed three ounces and the other one an ounce and three-quarters. Histological examination showed them to be the seat of chronic interstitial nephritis. I have no doubt that these renal lesions were the cause of the symptoms which led to the diagnosis of gastric cancer. I shall not go further into this case because I did not see the patient until she was dead, and I content myself with placing you in possession of the main facts.

Case 2 was a very similar one, except that the patient was not operated upon, so that I was able to keep her under observation. She had been under treatment at home for troubles of the sort mentioned above, beginning with vague stomach trouble and hyperacidity (I shall refer later to the connection between acidity and renal disease). She had a good appetite for two or three months in spite of the digestive disturbance. Later on the big appetite and the acidity gave place to a dislike for all sorts of food, but especially for meat. Then vomiting after meals supervened and became worse and worse, and the vomit often contained the remains of meals taken several days before.

At the St. Antoine Hospital they at once examined her gastric juice, when it was found not to contain any free hydrochloric acid, and there was a marked reduction in the combined acid, so that cancer of the stomach was suspected.

Then, too, the fæces were examined, and unmistakable traces of blood were found. These symptoms and the wasting led to a diagnosis of cancer, and she was sent into my wards.

At the first glance I had grave doubts as to the diagnosis, for, apart from the above symptoms, there were others pointing to hydruric nephritis. Arterial tension was between 28 and 30 in lieu of 15 to 17. This did not fit in with what we should expect in a patient with cancerous cachexia. The urine was extremely watery and contained very little solid matter. There was a faint trace of albumen. The methylene blue test showed that elimination was spread over four or five days, instead of about fifty hours. This patient then displayed marked chloride and urea retention, and the blood contained as much as three parts per thousand of urea instead of one-half part as does normal blood.

To clear matters up I had the stomach radiographed and the report was that the organ was the seat of atonic dilatation, but that nothing pointed to any pyloric obstruction. On the strength of these additional data I discarded the cancer hypothesis, and expressed an opinion in favour of the symptoms being wholly due to the kidney condition.

Not long after, in spite of strict dieting, the patient fell into a coma and passed away. The autopsy revealed typical chronic interstitial nephritis, with total absence of any disease affecting the stomach and intestine.

These two cases, one after the other, show that digestive disturbances of this kind may be simply due to chronic nephritis.

Now we come to a third case, which, though not verified by *post-mortem* examination, is nevertheless of great interest. It shows what excellent effects follow appropriate treatment and the unfortunate effects of a regimen which does not conform to the indications.

The patient was a man of 56, brought to hospital in a state of coma. His wife accompanied him and was able to afford us some useful information concerning his history. She told us that for some months past he had been suffering from sickness after food, with ever-increasing loss of flesh and physical depression. His doctor inclined to a diagnosis of cancer of the stomach, and having arrived at that conclusion he naturally placed the patient on a diet of very nutritive liquid or semi-solid food given in small quantities throughout the day—viz.: meat juice, powdered meat, eggs, purées, and so on. This highly nitrogenous food was well adapted for a patient with cancer of the stomach whose nutrition had to be maintained in spite of the vomiting.

According to his wife, the patient at first seemed to improve under this treatment—I omitted to mention that he was also having injections of normal saline solution. But as his nutrition seemed to improve the apathy increased and ultimately merged into coma.

The first thing that struck me was the very ammoniacal odour of the breath, testifying to uræmic intoxication. The pupils were widely dilated. Arterial tension was 25 and the heart was markedly hypertrophied with a cantering sound. Palpation of the abdomen failed to reveal any tumour or thickening.

Having diagnosed uræmia I at once performed venesection, withdrawing over a pint of blood, following this up with lumbar puncture. These two measures had for effect to withdraw a considerable quantity of the circulating toxins. Examination of the blood and cerebrospinal fluid showed them both to contain 1.5 parts of urea per thousand, so that there was obviously urea retention. Immediate improvement followed, and the patient tried to speak. I put him on water diet (three quarts of water containing 50 parts per 1,000 of glucose) and in three days his state had greatly improved. During these three days he had much diarrhœa and sickness, the former very fœtid and ammoniacal, the which I was careful not to check since it also assisted in depurating the organism.

I had the stomach and intestine washed out, and in four or five days the vomiting and torpor had entirely disappeared. The patient was then clamouring for food, so he was put on a diet containing little nitrogen. His arterial tension diminished and he was able to go home, but, of course, he still had an enlarged heart with cantering rhythm and insufficient renal excretion with copious, slightly albuminous urine.

Here then we have a good example of gastric disturbance simulating the symptoms of gastric cancer and pyloric stenosis obviously due to chronic nephritis. Before quitting this case allow me to call your attention to the excellence of the results following treatment directed to his renal condition. This regimen remedied the disastrous effects of the previous treatment which had intensified the nitrogenous retention. Truly, as has been remarked, "nothing is as dangerous as logic when it starts on false premises."

In future, therefore, whenever you are dealing with a patient who presents the ordinary symptoms of cancer of the stomach, in the absence of obvious tumour look for signs of chronic nephritis. The presence of renal symptoms does not, of course, exclude the existence of cancer, but it opens up the question whether the symptoms in question are not due to the renal state. When no tumour is found and there is manifest renal mischief with chloride and urea retention, we are justified in suspecting uræmia and treating him accordingly.

The treatment will, of course, be based on the pathogenic data. The disturbances that accompany chronic nephritis are due to various forms of retention. In hydruric nephritis, as you are aware, the urine contains but a small fraction of the toxic substances of the organism, which therefore exist in excess in the humours and the blood serum. The presence of an excess of urea in the blood affords the most valuable information in respect of prognosis.

No doubt, alongside the urea, many other substances are retained. Dr. Chauffard, for instance, found that cholesterine was present in abundance in the serum in cases of chronic nephritis. In practice we usually look for urea. When this is present in amounts inferior to one part in a thousand the outlook is not unduly serious, but above that amount, especially when it reaches two parts per thousand, the prognosis is grave, very grave.

The retention in the organism of urea and other toxic substances which are unable to pass through the renal filter explains the gastro-intestinal symptoms. The poisons that cannot be got rid of *via* the kidney are excreted *via* the stomach, whence the vomiting, the diarrhœa and the hæmorrhage from the stomach and intestine. The object of treatment, therefore, is to prevent the ingestion of substances that add to these retentions.

The treatment of the symptoms of uræmia will vary according to their severity. Slight initial accidents (loss of appetite and vomiting) call for strict diet. One or two days of water diet or lactose solution will usually abolish these symptoms.

When more marked or if they resist this simple treatment, we must wash out the stomach and suppress foods containing nitrogen.

When the vomiting and diarrhœa persist and the patient tends to become comatose, we must have recourse to energetic treatment: free bleeding, lumbar puncture, washing out the stomach and intestine, and in many cases an improvement will follow, though by the time the symptoms have attained this degree of severity the risk of a fatal termination is necessarily very great.

The moral which I wish you to draw from this lecture is that chronic nephritis may give rise to digestive troubles simulating cancer of the stomach. I insist on this in order that you may avoid an error of diagnosis which would entail a treatment disastrous to the patient.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Mayo Collier, M.S.Lond., F.R.C.S.Eng., late President of the British Laryngological, Rhinological and Otological Association; late Professor of Comparative Anatomy and Physiology at the Royal College of Surgeons, England. Subject: "Other Disorders of Impeded Respiration."*

ORIGINAL PAPERS.

PERSONAL EXPERIENCES IN THE SURGERY OF THE LARGE BOWEL. (a)

By F. T. PAUL, Ch.M.Liv., F.R.C.S.Eng.,

Consulting Surgeon, Liverpool Royal Infirmary.

After carefully thinking over the various branches of surgery in which it has been my lot to meet with fairly numerous cases, I came to the conclusion that I would offer you my experiences in the surgery of the large bowel. This would be too wide a subject for a single address if one proposed to travel over the whole range of surgical troubles in this region; but by limiting my remarks to those procedures in which some advance has been made during recent years, and of which I have had a fair personal experience, I hope to keep this address within reasonable limits. This will restrict me to the consideration of cases in which the following operations have been employed: (1) colotomy; (2) short-circuiting; (3) colectomy; and (4) excision of the rectum.

These operations are needed to meet very different pathological conditions, though most of them ultimately present the clinical feature of obstruction. One alone, however, cancer, accounts for more than all the rest put together, and therefore the greater part of my remarks will be concerned with cases of malignant disease—a disease which in the alimentary canal usually first threatens life by mechanically interfering with its functions.

(a) Abstract of the Address in Surgery delivered at the Annual Meeting of the British Medical Association, July, 1912.

In the first place I am quite convinced that cancer of the bowel may undergo spontaneous cure. It is much more easy to make a statement like this than to prove it, and I doubt if I can offer any really convincing proof. The following are the grounds on which the assertion rests:—1. For over 30 years I have been removing these growths and submitting them to personal microscopic investigation. I am, therefore, very familiar with their nature and appearance. 2. Many cases having the minute structure of cancer have not recurred, though known to have been removed with an insufficient margin of safety. 3. Malignant disease of the bowel is very rarely removed during the early stage, yet the percentage of cures is remarkably good. 4. The duration of life after colotomy for inoperable cancer of the bowel is often prolonged compared with that in other inoperable cancer cases, whilst a proportion of the cases seen, handled, and passed as malignant get well and the tumour disappears.

Types of Intestinal Cancer.

The three varieties of carcinoma are:

1. The large soft fungating "encephaloid" type.
2. The small hard "scirrhous" type.
3. The infiltrating "colloid" type.

All may be said to be primarily columnar-celled growths originating in the intestinal glands, and all ulcerate; but they follow different paths of evolution, and attain different degrees of malignancy which it is important to recognise.

The scirrhous variety is always unmistakable. It produces the hard ring stricture of the bowel, and is more common than colloid cancer, but much less frequent than the soft fungating type. This latter may usually be as easily distinguished from the colloid form of growth by the following characters: It is softer to the touch. There is a good deal of fungating growth within the bowel, but generally not much solid infiltration of the bowel wall. There are usually numerous large soft glands in the neighbouring mesentery, which are septic and not malignant. In colloid cancer, on the other hand, there is a hard-edged ulcer with no fungation. There is dense hard infiltration of the bowel wall, often attaining a thickness of from one to two inches, and giving it a solid feel. The glands, if infected, are not soft, but hard and glistening.

Misconceptions exist regarding the nature of these different tumours. In the first place, some seem to forget that "scirrhous" and "encephaloid" are merely terms of clinical or macroscopic significance, convenient when properly used, but otherwise very misleading. Almost any histological variety of cancer may take on either character without change of cell type. Even in the breast scirrhus does not imply acinous growth, as either round-celled acinous cancer or columnar-celled duct cancer may present this clinical feature. Some speak and write as though the term "scirrhous" was equivalent to mammary cancer, and consequently that a scirrhous type of cancer in the bowel means a cancer histologically resembling breast cancer; whereas no form of bowel cancer could be identical with a breast growth any more than bowel and mammary tissue could be identical. They may, and do, present similar clinical characteristics, and a hard ring stricture of the colon resembles a breast scirrhus, or a thyroid scirrhus, or any other scirrhus in its hardness, in its tendency to cell degeneration, to slow but inveterate growth, to lymphatic infection, and difficulty in complete eradication.

The really important misconception, however, concerns the relative malignancy of the three varieties of cancer. Usually the big, fungating, encephaloid type of growth is regarded as the most malignant; the colloid as being intermediate, and the scirrhous, or ring stricture, as the most benign. This arrangement is entirely wrong and out of accord with clinical experience. The colloid is the most malignant type, the ring stricture comes next, and the fungating type is the best—it being one of the least malignant kinds of cancer met with in the body.

Degrees of Malignancy.

It is a clinical fact of considerable importance, to which I have often referred at our local medical society, that the up-growing forms of cancer are essentially less malignant than the down-growing, ulcerating, and shrinking types. Take as examples, fungating epithelioma of a warty or cauliflower character on the tongue, larynx, or skin, and compare with much smaller but more infiltrating and ulcerating growths in the same positions. Surely our operation results have always been better, far better, in the former than the latter. Again, in breast cases, take the case of a soft encephaloid-looking duct cancer, and compare with a small infiltrating, shrinking scirrhus. The duct cancer, notwithstanding its malignant appearance, will often yield an operation cure, whilst the little simple-looking scirrhus turns up again in skin, glands, or internal organs. The duct cancer belongs to the up-growing papillomatous class, whilst the scirrhus infiltrates, degenerates and ulcerates. Papillomatous and villous growths are on the border line between innocence and malignancy. On the skin they are for the most part quite innocent. In the mouth or larynx we regard them with more suspicion. In the bladder they show a still worse tendency, and in the bowel I doubt if they can be called innocent at all. The familiar rectal polypus is adenomatous or glandular, rather than warty; but there are true papillomata apart from the polypi, and it is these which should always be regarded with grave suspicion.

Sarcoma of the Bowel.

Sarcoma of the large bowel in my practice has been very rare. Some years ago I had a case of small round-celled sarcoma of the rectum in a woman, aged 50, at the Royal Infirmary. It formed a spindle-shaped tumour of the middle third, stricturing the bowel without ulceration, and was recognisable as a sarcoma before microscopical examination. It was excised, but recurred, and the recurrence was fatal within a year. Recently, in private practice, I met with one of those rare examples of melanotic sarcoma of the rectum. It formed a small fungating tumour low down on the posterior wall in a male aged 70. He was not a suitable subject for a radical operation, and did not live long, for the growth proved to be very malignant, and was rapidly and widely disseminated. I do not refer to one or two cases of congenital malignant growth that I have seen in connection with the rectum, as they have no bearing on the matter in hand.

Indications for Operation.

If the growth be of the fungating type, recognised by its softness, bulk, situation, character of gland infection, etc., the surgeon would, on the one hand, feel justified in removing the tumour without necessarily interfering with any tissue much beyond the visibly affected area; or, on the other hand, if the risk to life seemed too great to allow of this being done, he would be encouraged to hope for a reasonably long period of relief by short-circuiting or colotomy. If the tumour prove to be massive and solid, and especially if there be evident glistening gland or peritoneal infection, or if the growth be in the rectum and can be felt as an abrupt hard-edged ulcer without fungation, then the case is one of colloid cancer, and the outlook would be recognised as discouraging. When a wide and thorough removal appeared warranted it might be undertaken; but as the prospect is never good in colloid cancer, either for excision or temporary measures, less risks to life should be accepted. In the case of ring strictures, always easily recognisable, the indication is to excise more widely than one used to think necessary, and to remember that it is in this type of growth we have the best reasons for following up the path of lymphatic infection. These rules for my guidance have come to me gradually as the result of practical experience.

The first great line of demarcation in the clinical arrangement of these cases is the presence or absence of complete obstruction at the time they come under a surgeon's observation. In all my earlier experiences, say from 1878 to 1890 or later, complete obstruction with fæcal vomiting and meteorism were regarded as necessary preliminaries to an application for surgical aid, and one soon found that any attempt to relieve the obstruction which did not provide for an immediate external escape of the locked up contents of the bowel was doomed to failure. So constantly fatal were all operations for intestinal obstruction in those days through delay that one thought very little of the objections to an artificial anus. It was a great event to save life at any cost. Nor should any such feeling of objection encourage us now to risk life for the sake of at once accomplishing a neat and clean surgical procedure. Even short-circuiting seems often to fail when colotomy is at once successful, and I feel sure that whenever there is complete obstruction in the colon a preliminary colotomy is by far the safest course in all those cases in which any form of internal strangulation can be excluded. The one class of case in which I should always wish to make an exception whenever possible is when the obstruction is actually at the ileo-cæcal valve, and it is necessary to open the small bowel. There are such decided objections to a fæcal fistula connected with the small intestine, and usually such favourable prospects for short-circuiting in this situation, that the additional immediate risk may be accepted unless paresis and collapse have already supervened, when an artificial anus is imperative.

Diagnosis of Bowel Cancer.

Unfortunately we are still without means for recognising cancer of the bowel in its really early stages. In fact, it sets up no symptoms at this period of its growth which would lead a patient to consult his doctor, except when low down in the rectum. Here it excites irritability, and attracts attention by the presence of blood and mucus, and so often allows an early diagnosis; but higher up we have almost invariably to wait until the growth has begun to impede the passage of fæces before the patient is sufficiently alarmed to seek advice. Large ulcers without marked obstruction are chiefly characterised by intestinal toxæmia, with elevation of the temperature, flatulent dyspepsia, loss of flesh, irregular colic with constipation or diarrhœa and mucus and blood in the motions—visible when the growth is low down, occult when higher up. A tumour may frequently be felt. The ring stricture usually causes less disturbance to the general health, but more colic and more obstruction. X-ray screen view of the behaviour of a bismuth meal is useful if its limitations are recognised. It may inform us as to the site and the amount of constriction, though in regard to the latter atony or tonicity of the bowel must be taken into consideration. In no circumstances can it indicate either the extent or the malignancy of the growth, nor can the ready passage of a bismuth meal be regarded as a contra-indication to operation. If the disease is within the reach of the sigmoidoscope this treatment may be of considerable assistance in the diagnosis of growths situated in the pelvic colon, where they frequently escape touch when examined either by the rectum or the abdomen.

Operative Methods.

Right lumbar colotomy is now shorn of its terrors by greater familiarity with abdominal operations. When the colon is distended it is easily found on either side. When not distended the peritoneal cavity may, if necessary, be opened for exploration and closed again with but slight detriment to the patient. I always suture the bowel to the skin, as in iliac colotomy, and very rarely attempt to make a spur, since the lumbar operation is almost invariably a temporary measure to be done away with as soon as it safely can be. The disability resulting from an iliac colotomy is not nearly so great as is so often assumed. If it were, the operation would be robbed of three-fourths of its value. When a satisfactory surgical result has been obtained it only needs a little pluck and a desire to make the best of a disadvantage for any ordinary patient to continue to lead a useful life. I have known a doctor to continue the full work of a general practitioner for years, a ship steward to follow his avocation on a big Cunarder, and a lady with this disability for life to continue to make a charming hostess and to be the brightest member of her family. With these and many similar examples within my experience I cannot sympathise with the weak-spirited individual who sinks under the misfortune of such a personal discomfort.

Short-circuiting is a more pleasant operation for the patient than colotomy, and for this reason may replace it whenever it is feasible to do so, but the latter will always be necessary for inoperable rectal cancer, for dangerous obstruction, and for colitis, and some other ulcerative affectations of the colon, so that the former really only comes under consideration in a small proportion of the whole number of cases.

However good the results of short-circuiting or colotomy may be, we must always wish to excise a malignant tumour of the bowel whenever circumstances permit, and I propose now to deal with the operations planned for the removal of such growths, taking first those situated in the colon, and then those in the rectum. The cæcum and the sigmoid are the most favourable, and fortunately the most frequent situations for malignant tumours of the colon. The cæcal operation is certainly the more extensive of the two, and I used to prefer the sigmoid site, but on the whole I think the cæcal cases have done the best, chiefly in the way of the cure being more permanent. Increasing experience has encouraged me to undertake the major operation in more cases of cancer of the colon, and in less cases of cancer of the rectum.

Rectal Surgery.

There still remains the lowest portion of the large bowel to be dealt with, the rectum, and I do not propose to ask your attention now to any conditions of this part, except those which call for excision. One may sometimes attempt a resection of the rectum for other affections than malignant growths, but too rarely for such cases to have any influence upon our general method of operating. I have, indeed, excised syphilitic strictures, but it is long ago, and now it seems to me that such a serious operation as resection should be reserved for those cases in which the disease will prove fatal if not removed, the rest, if needing it, being treated by iliac colotomy. I have already expressed the view that a well-planned colotomy is not inconsistent with health and reasonable comfort or with the pursuit of ordinary avocations when a little consideration is extended to the person who has had to suffer this misfortune. If this were more generally admitted some lives—perhaps many—that are risked and lost would be saved, and many that struggle on to the end in misery would have some comfortable days in store for them. All cases of advanced cancer of the rectum, incurable fibrous stricture from syphilis or other cause, some recto-vesical fistulæ, and some tuberculous and other ulcerations should be treated by colotomy.

Does a preliminary colotomy lessen the risk of excision? Yes, it does. I think this cannot be doubted, and if so one should give great weight to the fact in all the more serious cases.

Operations for cancer of the rectum are on the whole less favourable than those on the colon. Contrasting the two I should say in excision of the rectum we have more hæmorrhage and shock, usually a more difficult operation, less freedom in removal, a larger and more serious wound to heal and a more malignant type of cancer to deal with. On the whole the results of excision of the rectum are good, but there are reasons why we should expect a slightly higher primary death-rate, and a greater probability of recurrence than in the case of colectomy.

THE PRE-OPERATIVE DIAGNOSIS OF APPENDICITIS: A DEMONSTRATION OF A DORSAL METHOD OF EXAMINATION. (a)

By WILLIAM EWART, M.D.Cantab., F.R.C.P.,
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This method, which provides *normal " standard " physical signs* for the healthy state, and also for the completeness of the post-operative result, and *abnormal* " localising physical signs " for the retro-cæcal lesions, and for some of the " central " and of the " pelvic " lesions, whereas abdominal palpation can reach only the " anterior lesions," adds considerably to the range of our *objective pre-operative diagnosis* (both positive and negative) by demonstrable physical signs. It is simple and rapid, painless and harmless, and, within its own competence, singularly accurate and reliable. *The practical conclusions* claimed to have been established by an extensive clinical investigation, and by confirmatory *surgical test cases* are as follows :—

It is the only available test (1) for the normality of appendicial district; and (2) for the post-operative results of surgical interference, whether completely successful, or sometimes calling for a secondary operation. (3) It is unique in supplying direct localising evidence in the large group of *retrocæcal lesions,* which are inaccessible to pre-operative diagnosis, even by X-rays; often also in the *pelvic,* and sometimes in the *central* lesions (4) Except in the " anterior " group of appendicitis, hitherto the only group " of physical signs," it is the only *objective evidence* for deciding at once *the urgency* of operations which at present are undertaken for " existing symptoms "; and (in their absence) the expediency of operations now justified by nothing else than the plea of " safety." (5) It has a direct bearing in all cases upon the *modus operandi,* not only in the deep-seated and posterior ones; but particularly in the *anterior ones* (*re* possible " extension," or " no extension " backwards), where it is capable of settling any doubt as to the management of the retrocæcal field.

To sum up: (6) It is indispensable for *certificates* of appendicial soundness, and of a perfectly normal result after operation; (7) for the *decision as to an operation* in all sub-acute, latent or doubtful cases; and (8) for the most satisfactory operative management of severe cases. With exceptional reservations a dorsal examination should never be omitted as an essential part of the routine of surgical preoperative diagnosis.

The demonstration was illustrated by diagrams and by a large number of clinical tracings, taken before and after operation, which bear out these conclusions.

ON THE

NECESSITY FOR A NECROPSY IN EVERY CASE OF DEATH. (a)

By J. C. McWALTER, M.A., M.D., LL.B.,
F.R.F.P. and S.Glas.

What do people die of? The street arab will scoffingly say—" Of shortness of breath." He is much nearer the truth than fifty per cent. of medical certificates of "causes of death." We are touchingly told, in Dr. Kirkpatrick's admirable " History of the Trinity College Medical School," that at one time the King's Professors of Medicine strongly objected to Macartney, the Professor of Anatomy, performing necropsies on their patients—feeling, doubtless, says our author, that it was not consonant either with their reputation or their dignity to have their diagnoses reversed by the *post-mortem* disclosures of an unsympathetic colleague.

Even on the Continent, and where the services of the most skilled hospital physicians were availed of, I have been informed that in a series of cases the diagnosis was not right even once as proved by the *post-mortem* finding.

Our American brethren have a sceptical query —" What is rheumatism? " The answer is—" Well, in ninety per cent. of the cases—certainly not rheumatism." When we ask, "What did the patient die of? " the answer in ninety per cent. of cases should be—" Well, certainly not of the certified cause of death."

Sickness and death have suddenly become a live question. The State is stepping in. Hitherto it only meddled, in a half-hearted, tentative sort of way, in what was called preventive medicine. This was taken to mean zymotic diseases—which do not account, at the most, for more than 3 to 4 per cent. of all deaths.

Now the State stands forth to tackle the great problem, not only of death, but also of sickness and unfitness for work. A certain statesman has decided that half the poverty is due to sickness, and he is prepared to spend 20 millions a year in dealing with sickness.

The great problems of sickness and death depend on Vital Statistics. Immense sums are spent to have these statistics prepared. But are they any real use? I suggest not. How should any Vital Statistics which were intended to serve any scientific purpose be prepared? Obviously from causes of death verified by necropsies performed by competent men. How are they really prepared? Except in cases of violence necropsies are not performed in one per cent. of the cases of death, and the alleged "cause" is merely a wild guess or a conventional statement by a practitioner who is not even required to state, or to know, that the patient is dead at all.

(a) Abstract of paper read at the Surgical Section, B.M.A. Annual Meeting, Liverpool.

(a) Paper read at the Berlin Congress of the Royal Institute of Public Health, July 26th, 1912.

As an example of prevailing ignorance let me quote my own case. I find that I have certified considerably over a thousand "causes of death." Out of this thousand there were not ten cases verified by *post-mortem* examination. Not in 95 per cent. of the cases did I see the patient after death. It is quite possible that in 60 or 70 per cent. of the cases the "cause of death" was either erroneous or so vague as to be scientifically worthless.

Now, the Registrar General's Returns are made up of my thousand cases, and of the thousand cases of other practitioners who are probably not less ignorant than myself. Surely it is a savage farce to draw conclusions from data such as these?

In what percentage of cases are proper *post-mortem* examinations made? No definite figures are available, but the number appears to be less than one per cent.

I find that out of about 100,000 deaths there are about 1,600 from violence. These comprise the greater part of those which are the subject of coroners' inquests. Thus the very cases in which *post-mortem* examinations are actually held are those from which the least information of any value is derivable—for we do not want to know the cause of death where a man is killed by violence, but when he dies from disease.

Out of your 100,000 deaths there will be about 1,500 in lunatic asylums. A certain number of these will be the subject of necropsies, and we must confess that the yield of information afforded by them is not great; but really if a man be twenty or thirty years in an asylum it does not so much matter what he died of.

Deaths in workhouses and workhouse hospitals comprise a large proportion of every 100,000 deaths. In Ireland they would be about 10,500. The number of necropsies on these is very small indeed.

Let us look at the question in another way. There die in Great Britain about a million people every year. The State proposes to spend some £25,000,000 a year in preventing sickness and death. There are also actively engaged in warding off death some 30,000 doctors, who, at an average salary of £300 a year, receive some £9,000,000 annually for for their services. And their endeavours are largely futile, and all the money spent must be largely wasted. Why? Because really we are working in the dark. We don't know what people die of. Our opinions as to the disease and the cause of death may be of the most fallacious and misinformed type possible; but instead of correcting them by a *post-mortem* inspection, we are allowed to embalm them in the Registrar General's Reports, and so lead others into the same morass of ignorance.

Death, we are told, comes in through the brain, the lungs, or the heart. It may well be so. If we continue to ascribe death to cardiac failure, dyspnœa, or convulsions, we may, perhaps, be right; but can any man suggest that we shall ever improve the science of medicine, or do anything really helpful to the State so long as we are satisfied with these vague generalities.

Further, I submit that we are led even further astray by those authorities who ought to be infallible. Glance at the Registrar General's "New List of Causes of Death." You are begged not to state that your patient died of carbuncle, but you may certify he died of eczema. You are implored not to say that he died of peritonitis, but you may attribute his demise to an ulcer. You must not say a child died from gastric catarrh, but you can state that its fatal trouble was varicose veins. I doubt if caries pure and simple ever killed anyone, but I find I can certify that it did, whereas I cannot say that "heart disease" pure and simple killed a man. For the life of me I cannot see why a man should be permitted to state that "arthritis" was a cause of death, whilst he is warned off attributing it to "brain tumour." Why under heaven should abortion be put as a cause of death? We know, of course, that death will often follow it—just as it may follow the scratch of a pin, but surely it is not the cause—or, if it be, "childbirth" is a far commoner cause, and it is not recognised at all. What, then, is the sense of ascribing death, generically, to "Diseases of the Nose," "Diseases of the Eye"? To cap the climax you are exhorted to state, by the mystic letters P.M., when the cause of death has been verified by *post-mortem*, and when you write to the Registrar General for the number of deaths verified by *post-mortem* you find that no such list is available.

It is obvious that the healing art can never advance until we foresee that every blunder of ours will be made manifest at the *post-mortem* examination. It is as clear as the sun that medical treatment is mere blind muddling in the dark when we never know anything about our patient except that he died.

On the other hand, an immense mound of prejudice must be overcome before the public will submit to universal necropsies. It must be shown that the practice will put an end to the common horror of premature burial. It will gradually be seen that it protects every man from poisoning or foul play, as well as incompetence. We must realise that each of us ought to be proud if by his death he contributes something to a knowledge which may serve posterity. It cannot come to pass in a day, perhaps not even in a generation; but I suggest that if the Berlin Congress of the Royal Institute of Public Health marks the first public insistence on the necessity for necropsies it will have done good work for mankind.

DEEP PETRISSAGE OF THE ABDOMEN AS AN AID TO THE DIAGNOSIS OF TAPEWORM.

By RICHARD J. CYRIAX, M.R.C.S., L.R.C.P. Lond., L.M.

As a general rule, a patient is not suspected of having a tapeworm until segments are passed in the stools, which is naturally pathognomonic of the condition, any abdominal symptoms presented by an unsuspected case being ascribed (in the lack of further evidence) to dyspepsia; but there are sometimes sufficient grounds for believing that a tapeworm is present, even when no segments have been passed. In such a case the problem of diagnosis is sometimes a difficult one, unless the same measures are resorted to as when a tapeworm is known definitely to be present—namely, dieting and the administration of salines, followed by an anthelmintic and a brisk cathartic; thus the diagnosis and treatment are often combined. Many authorities hold, however, that these procedures are unjustifiable except in undoubted cases. The administration of a purgative alone, without an anthelmintic, is advised by some authors, the motions being subsequently examined for segments and ova; but a purge by itself is apparently not always successful in bringing away proglottides, and examining the fæces for ova is a very unpleasant process. In any case, diagnosis by means of anthelmintics involves considerable discomfort and annoyance to the patient, temporarily interrupting the daily routine of work in a manner particularly harassing to busy people. When a diagnosis of tapeworm has been confirmed, drastic action of the nature referred to of course becomes necessary, but sometimes cases of unconfirmed suspicion occur, in which smart purgatives even by themselves are contraindicated and not to be made use of unless necessary—*e.g.*, such conditions as severe hæmorrhoids.

The object of this paper is to direct attention (it is believed for the first time) to deep pétrissage of the abdomen as an aid to the diagnosis of tapeworm. Cases in which the presence of a tapeworm is actually suspected without any supposed segments having been passed are indeed comparatively rare, but they do occur, and require elucidation and cure; and beyond this, the author himself has seen and further heard of several cases in which the parasites' presence was unsuspected until the pétrissage caused proglottides to appear in the stools, cases in which this occurrence does not seem to have been of the nature of a coincidence. In one of these cases, the patient had taken all kinds of purgatives for the relief of constipation without passing any segments; I herewith quote such portions of the notes as bear essentially upon the point under discussion.

Case. Mr. A. B., business man, æt. 50, came under observation September 12th, 1910. He complained of chronic constipation of about twenty years' standing, flatulence, and an "uneasy feeling" in the abdomen, referred to the umbilical region. He could not recall how long the latter condition had lasted, but it had been present for a long time. He had continually to resort to laxatives and enemas in order to produce a motion, and had tried all sorts of medicines for the relief of constipation. His appetite was good. Examination of the abdomen was negative except for some tenderness over the descending and iliac colon. His tongue was slightly furred.

It was thought at first that the subjective sensation in the abdomen was due to the constipation. The patient was advised to stop all purgatives and to undergo a course of mechanotherapeutical treatment, consisting of deep pétrissage of the abdomen and active exercises directed toward strengthening the muscles of the abdominal wall.

After three treatments the patient passed one segment of a tapeworm independently of a motion. After another treatment he passed about twenty segments, which, on examination, appeared to be derived from a *Tœnia solium.*

The patient was advised a light diet for twenty-four hours, and received two Seidlitz powders during the day. The following morning he took a drachm and a half of liquid extract of male fern fasting, followed two hours later by an ounce and a half of castor oil mixture. About three yards of worm were passed. The head was not found, but as the segments could not be examined immediately and had to be brought by the patient for the purpose, it is quite likely that he had overlooked the head and thrown it away with the remainder of the motions.

The umbilical sensation of uneasiness now became very much less, and had disappeared entirely ten days later. Mechanotherapeutical treatment, as outlined above, had meanwhile been continued, ceasing October 28th, 1910.

I have seen this same patient at intervals since the latter date, the last time being November 22nd, 1911. He said that although he had very carefully watched his motions for proglottides, and had occasionally repeated the anthelmintic treatment, he had never passed any segments.

Petrissage.

By deep abdominal pétrissage is meant a series of circular movements executed in the direction of the large intestine with sufficient energy to cause a thorough kneading of the abdominal contents. In carrying it out, it is essential that the abdominal parietes and the fingers of the operator move as one over the underlying viscera, otherwise the process is resolved into a mere superficial effleurage, which hardly influences the viscera. It is not necessary for the pétrissage to be executed very hard in order to achieve the desired end; and unless the technique is defective, it should cause no pain. When properly performed it presumably effects the dislodging of the proglottides in two ways—by promoting peristalsis and by mechanically separating segments of the distal end of the parasite by tearing through their attachments. Of these two actions, the latter is probably by far the most important. The increased peristalsis seems to act only as an adjuvant in expelling the separated segments, and probably no intensity of it can actually dislodge the head of the worm; nor does it seem possible to reach the point of achieving this by the merely mechanical effect of the pétrissage. The latter is, therefore, only a means of diagnosis as regards tapeworm infection, and cannot replace the usual curative treatment.

Conclusions.

The advantages maintained for this method of establishing a diagnosis of tapeworm are briefly as follows:

1. It is entirely harmless, and reveals worms in some cases in which purgatives alone have apparently not been successful.
2. It does not interfere with the patient's regular work, and causes no discomfort worth mentioning. As a general rule, only about three or four applications of deep abdominal pétrissage, each of fifteen minutes' duration, are required to establish a definite diagnosis.
3. It abolishes the unnecessary administration of purgatives, alone or in combination with anthelmintics, in cases when they are contraindicated.
4. It is apparently uniformly successful. The author's brother, Dr. Edgar F. Cyriax, has kindly allowed it to be stated here that he has carried out at least 30,000 deep pétrissage treatments of the abdomen for many varieties of complaints, and that no case in his experience has yet occurred in which a patient was discovered to have a tapeworm within such a period of time after the conclusion of the treatment as would leave no doubt that the parasite had been present during it, and many of the patients were under observation for a long time. Moreover, several cases have occurred in this series in which, during the course of treatment for other complaints, the presence of a tapeworm was first revealed through such deep pétrissage of the abdomen causing proglottides to be passed in the stools, no other symptoms having previously manifested themselves that could justify a suspicion of the actual fact..

Dr. G. E. Morrison, M.B., C.M.Edin., the well-known correspondent of *The Times* in Peking since 1897, has been appointed Political Adviser to the President of the Chinese Republic.

SOME MEDICAL ASPECTS OF EUGENICS. (*a*)

By A. F. TREDGOLD, L.R.C.P.Lond., M.R.C.S.Eng.

(*Concluded from page* 112.)

In the examination of the family history, which is, of course, the essential point upon which our advice regarding marriage must be based, it is of the utmost necessity to inquire into the condition of the collateral as well as the direct antecedents. As in hæmophilia, the taint may be transmitted by a person not himself affected, and a person may be apparently normal, but, if he comes of a markedly abnormal stock, may still pass on the defect. Of this I have seen very many examples, and the only safe rule is to ascertain the condition of every member of the family, collateral and direct, for three generations. When this is done it will be found that cases fall into three groups. *Firstly,* there are individuals belonging to a stock of which the members are healthy, have lived to a good age, and are in every way a credit to the nation. Such should be strongly advised to marry; indeed, I hold it to be the duty of the State to encourage their propagation in every way, even by the substantial endowment of their children if they are in poor circumstances. *Secondly,* there are those who come of a markedly morbid stock containing members who have been insane, epileptic, criminal, profligate, or otherwise socially incompetent. Not only should the marriage of such be forbidden by the physician, but it should be prevented by the State. *Thirdly,* there is an intermediate group in which there may be a slight neurotic tendency or indication of some diathesis which is not of a particularly disabling character, or of which we do not yet fully understand the racial consequences. In the present state of our knowledge these must be given the benefit of the doubt; at the same time, however, we should strongly advise against marriage with a person of similar tendencies. I may here remark that an excellent schedule for recording family histories has recently been published by the Eugenics Education Society, which, if generally adopted, would be of the greatest value in supplying us with the necessary data upon which to form our conclusions.

In addition to the investigation of the family history, the individual himself should be medically examined before any opinion is given. Apart from the presence of inherited taint, it is my opinion that certain bodily states of the individual may so impair the germ plasm as to produce injurious effects upon the offspring. What is commonly called hereditary syphilis is, of course, not hereditary at all, but acquired *in utero;* but there are reasons for thinking that imperfectly treated syphilis may lead to a real germinal impairment which is transmissible. The same is true of plumbism, and, as has been shown by recent microscopical work, also of chronic alcoholism. I believe that the time is coming when the State will be compelled to assert its authority on this question of marriage, and I have already advocated the granting of licences based upon the medical condition of the individual and the eugenic fitness of his family record. In the meantime, it behoves us to be prepared to give advice to the ever-increasing number of our patients who appeal to us on this matter.

So far, I have spoken as if marriage and propagation were synonymous terms. But they are not; marriage has a twofold object—the affording of a congenial and helpful companionship, which is in itself a blessing of no mean value, and the procreation of children. The question arises, where the only bar to marriage consists in the undesirability of propagation, is it possible to obtain the advantages of a beneficial companionship without this evil result? We know that methods are made use of to secure this end, but such methods are not always reliable; they involve considerable inconvenience, and they have even been denounced as dangerous. This brings me to the next point I wish to consider—namely, that of sterilisation.

Sterilisation.

It is sometimes urged that such a procedure—or, indeed, any artificial restriction of propagation except that of abstinence from intercourse—is immoral. I fully admit that many methods which are now in vogue may, and frequently do, conduce to immorality and illicit intercourse; but I cannot agree that they are immoral in themselves. I regard the person who brings into the world diseased and degenerate children, whose existence is often a lifelong misery to themselves as well as a source of injury to the State, to be far more guilty of immorality than the one who refrains from such procreation, even by the adoption of artificial methods. It will, of course, be understood that I am only referring to artificial restriction on medical or eugenic grounds. The adoption of such a practice from motives of selfishness, luxury, and the desire to shirk parental and civic responsibility cannot be too strongly condemned.

It is undeniable that the question of sterilisation produces a very considerable feeling of repugnance in the minds of many people. I believe that much of this is due to ignorance regarding what is really meant. Sterilisation is frequently spoken of as mutilation, and there are even many medical men who look upon it as implying castration or ovariotomy. The complete sexual impotence and the pronounced alteration in the whole being which result from such operations fully account for the natural feeling of abhorrence. Fortunately, there is now no need for such barbarous methods if the object is merely to prevent propagation, although I think that even castration has its use and is attended with considerable advantages in certain types of cases. Sterilisation consists merely in ligature of the Fallopian tube or *vas deferens.* The operation is perfectly simple; it has now been performed for several years and upon hundreds of cases in America; it does not result in any loss of sexual power or desire, or any interference with secondary sexual characters. Its sole effect is to render the individual incapable of propagating his or her species.

There can be little doubt that some of the objection which is felt to this proposal is attributable to the intemperate and indiscriminate manner in which it has been advocated by injudicious persons. It has been vaunted as a national panacea, and it has even been suggested that the insane, the feeble-minded, imbecile and idiot, the criminal and the chronic pauper may safely be turned loose upon society once they have been sterilised. This view is, of course, absurd. Sterilisation will prevent these persons propagating, but it will not make a mental defective competent, a pauper independent, or a criminal moral. In very many cases segregation and supervision will still be called for on account of personal traits. Nevertheless, I believe that it is a most valuable measure in suitable cases, and one which is certainly worthy of our careful consideration.

The question is, what are the suitable cases? I entertain no doubt that there are many individuals who should be compulsorily sterilised. For instance, of the number of patients annually certified as insane, about one-third of those in asylums and one-half of those in private care are discharged recovered, partially recovered, or unimproved. About three-fourths of the women and nine-tenths of the men thus discharged are of the reproductive age, and there is not the slightest doubt that very many of them do reproduce. I do not suggest that all these discharged lunatics come of such a pronounced neuropathic stock that their offspring is degenerate, but I am quite certain that this is the case in the majority, and that their liberation is attended with a very considerable menace to the nation and to posterity. I do not know that the ordinary sane man in the street quite thinks that they are liberated for the express purpose of counteracting the diminishing birth-rate, but he certainly regards it as an extraordinarily unbusiness-like, even absurd procedure. And it is absurd; but the authorities are powerless in the matter. Asylums are not institutions for the carrying out of restrictive eugenics; they are for the treatment of the insane, and as soon as a patient recovers his sanity his further

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(*a*) Delivered at the Medical Graduates' College and Polyclinic, March 6th, 1912.

detention is illegal; as the law now stands he *must* be discharged. It is for cases of this kind, where the insanity is clearly due to morbid heredity, that compulsory sterilisation is not merely justifiable, but a national necessity. In the same category I would include those epileptics and feeble-minded for whom permanent segregation and close supervision is not necessary, and where the only danger consists in their propagation.

I am afraid that compulsory sterilisation is still a long way off, but the eugenic movement has now spread to such an extent that many persons exist who are willing to submit to the operation, and who are coming to us for assistance. It is from this point of view that I desire to say a few words.

And, first of all, it is, perhaps, necessary to remark that there is no legal bar to the performance of this operation. Doubtless, if it were found to be made use of for improper purposes, and solely to shirk the inconvenience and responsibility of parenthood, it would become necessary to prohibit it by severe penalties, as in the case of abortion; but at present it is perfectly legal, and in proper circumstances I believe that the medical man is not only quite justified in acceding to a request to perform the operation, but that circumstances occur in which he is justified in suggesting and recommending it. There are, however, two points which must be borne in mind. For his own safety the surgeon should require a written request from his patient expressly stating that he or she fully understands that the consequences will be lifelong sterility. A short time ago a medical man told me that some years after sterilising, at her own request, a female patient, she had bitterly complained that she had not understood that the effect would be lasting, and that she would *never* have any children. This would have been prevented by the course I have indicated. The next point is, the operation should never be performed upon minors, even at their own request or upon that of their parents or guardians. A few months ago this matter was raised in the columns of the medical journals. The questions asked were specific ones, and were: "Has a father the right to have his son (an epileptic, 12 years of age) sterilised, and is a surgeon legally and morally justified in carrying it out?" (*Lancet*, July 29th, 1911, p. 328.) Whether the object was to arouse a general discussion I do not know; certainly it did raise a good deal of discussion, but without, as is not unusual in such cases, the concrete question receiving any adequate answer. In my opinion, the answer to both queries is in the negative. A minor cannot make a legal contract; his parents or guardians are not entitled to make a contract for him which will bind him after he has reached full age, certainly not one which will be attended with lifelong consequences. Such might be done by the State in the general interests of the community, but the parent has no right to arrogate to himself the functions of the State. I hold, therefore, that operation in such a case would be quite illegal. With regard to the circumstances in which it is justifiable, I do not think I can do better than mention a case which occurred to me only a few weeks ago. I was consulted by two young persons as to the desirability of their marrying. They had become engaged some time previously without any such question entering their heads; but a course of eugenic literature had raised doubts, and they came to ask for advice. They were both well-educated people, independent, and moving in good society. The girl was somewhat neurotic and hyper-conscientious, albeit well developed and organically sound; but her family history showed a marked tendency to consumption. Two of her brothers, her father, and her father's brother and sister had died of phthisis. On the young man's side there was a strong history of insanity. One of his brothers was feeble-minded, another was epileptic, his father had had two, if not more, severe nervous breakdowns, two of his father's brothers and his father's mother had been insane in asylums, whilst the condition of other members of the family was not quite satisfactory. The patient himself was well developed and healthy, decidedly above the average in intellectual capacity, had an excellent school and college record, but was somewhat unstable and inclined to be excitable. My experience of unions of this kind is that the offspring is very rarely healthy. Insanity or epilepsy is extremely probable, and if pregnancy, childbirth, or the early years of child-life should be accompanied by anything adverse, there is a strong probability that the offspring will be idiotic or imbecile. I, therefore, strongly advised against marriage. The pair were obviously deeply attached to one another and greatly disappointed, but I do not think they were unprepared for the opinion, for their next question showed that they had gone into the matter pretty thoroughly. They asked, would there be any bar to marriage provided no children were born, could the ordinary artificial methods be relied upon to prevent this, or did I think that sterilisation should be performed? Had the propagation of only one of them been contra-indicated, I should have tried to persuade them against marriage at all, on the ground of wastage of good material; but since this was so with both of them, and since there was evidently a real affection between them, I unhesitatingly advised in favour of sterilisation, and in so doing I consider that I was acting in the best interests of the pair as well as of the State. I think this case is a very good illustration of the circumstances under which we are justified in advising sterilisation—namely, where there is nothing in the condition of the individuals to contra-indicate marriage, but where the family history is such that propagation should not be allowed.

OTHER ASPECTS.

I have mentioned the subject of segregation. At the present time, although this is a recognised legal procedure with regard to several classes—*e.g.*, criminals, lunatics, idiots, imbeciles and inebriates, it is not adopted from eugenic considerations. But indications are not wanting that a very considerable advance has taken place in public opinion regarding this matter. I think there is very little doubt that the near future will see the recognition of the principle of segregation from the eugenic aspect. This will inevitably bring eugenics into still closer touch with medical science.

In conclusion, there is one other matter to which I may refer. The object of eugenics is not merely the eradication of existing degeneracy, but its prevention in the future. The prime and initial cause of this degeneracy is by no means fully understood, and it seems to me that this is a field in which even busy medical practitioners may find the opportunity of rendering incalculable service to the good of the race. I do not suggest that he can undertake laboratory work or extensive biometrical investigations, but he can carefully note and place on record many facts regarding the transmission of disease and the effects of adverse conditions upon offspring, and so considerably advance our knowledge of these important questions. The science of medicine, I may remind you, owes no little of its present position to the clinical work of capable and enthusiastic general practitioners. My opinion is that the initiation of that pathological condition of the germ plasm which culminates in degeneracy is to be found in the presence of disease and adverse environment, and any measures which will secure hygienic improvement and more efficient treatment will not fail to *prevent* unfitness in the future. Much progress has already been made on these lines, but there is still great need for improved facilities for the treatment of certain diseases, particularly, for instance, syphilis and gonorrhœa. It is to be hoped that the movement which is now on foot to secure greater facilities for the more thorough treatment of these conditions will have a successful issue. In so far as it aims at improving the general health of the community, the Insurance Act is a decidedly eugenic measure, and in this respect, I am sure, has the support of the medical profession; but nothing can be more disastrous to the working classes and to the State than inadequate medical attention, and it is because we feel that, as it stands, it does not admit of adequate treatment being afforded that we rightly object to this measure. The health of the nation is, or should be, the concern of the State. It is unjust to impose the burden of its cost upon an already hard-worked and ill-paid profession.

It will be obvious that the time at my disposal has only admitted of a very brief review of the main points of contact between eugenics and medicine; each aspect I have dealt with might in itself form the subject of a separate lecture, but I trust I have said enough to show that the relationship is a very intimate one and one which has not been undeserving of our attention.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Gastrostomy.—Mr. Willmott Evans operated on a man, æt. 43, who had been admitted suffering from dysphagia. For the last three months the patient had experienced increasing difficulty in swallowing. At first he had only noticed that he had to chew his food more thoroughly than previously, but this was followed by increasing difficulty in swallowing, so that at the time of admission he was unable to take any solid food. Liquids were still able to pass the obstruction. He had lost a great deal of weight, probably 20 or 30 pounds, but his general health was still fair. He said he felt the food stop at a point opposite the upper border of the sternum, but an œsophageal bougie was able to pass easily until it reached an obstruction about twelve inches from the teeth, where it was arrested. A diagnosis was made of malignant stricture of the œsophagus, and it was decided to perform a gastrostomy.

An incision two and a half inches in length was made immediately to the outer border of the left rectus and about midway between the umbilicus and the xipho-sternal articulation. When the peritoneum was opened the stomach was easily found and was brought to the surface. A point was selected about midway between the two curvatures and rather nearer the cardia than the pylorus, and an incision made in the stomach wall sufficiently large to admit a No. 8 Jacques catheter. This was passed into the stomach for about a little more than an inch and fixed in apposition to the margin of the opening by means of catgut stitches. The stomach wall was then pushed inwards for about half an inch, and a purse-string suture passed through the walls of the stomach, but omitting the mucous membrane. It was drawn tight round the catheter. Two similar purse-string sutures were passed at half-inch intervals outside the first, so that a funnel-shaped portion of the stomach wall was made to project into the viscus, and at the apex of the funnel was the catheter. Two fixation stitches were inserted, one above and one below the opening into the stomach; each passed through the abdominal wall of one side of the incision, then through the greater part of the stomach wall, and lastly through the abdominal wall on the other side of the incision. When these stitches were tied the stomach was held up firmly against the abdominal wall. The incision was then sutured, a clip was placed on the catheter to prevent any egress of the gastric fluid, a gauze dressing was applied, and the patient returned to bed.

Mr. Evans said that there is still a good deal of difference of opinion as to the best time of performing the operation of gastrostomy in a case of obstruction of the œsophagus. When the operation was first introduced the danger attendant on it induced surgeons, and especially physicians, to postpone it to a very late stage of the disease, so that it was often performed on patients who were almost moribund. This practice, he thought, did not tend to improve the mortality, and the operation was greatly discredited. Though no one would nowadays advise postponement of the operation to so late a stage of the disease, yet many consider that the operation does not need to be performed until the patient has become incapable of taking any form of nourishment by the mouth. This appeared to him to be unwise, for it must militate against the success of the operation if the patient is allowed to become weakened by a great diminution of the quantity of food taken. It seemed to him to be far wiser to operate as soon as the patient has definitely lost weight, for that, he considered, was an indication that he is no longer able to take sufficient food by the mouth. The choice of operation, he remarked, is simple; in his opinion no other form of operation is so good as that with which the name of Senn is associated, though it was not really invented by him. There are two great advantages in this operation: the first is that, when it is correctly performed, there is no risk of the escape of gastric contents, and the painful and troublesome excoriation of the skin, which at one time frequently occurred, cannot take place. There was, he said, a further advantage in this operation: if it is wished, it is possible to feed the patient on the operating table, and when the patient is in a very low condition for the want of food this is a point of no little importance. The catheter, he remarked, is stitched to the stomach wall by means of catgut sutures, so that it may become loosened spontaneously in a few days' time. For the other sutures silk is most suitable.

The patient recovered rapidly from the anæsthetic. There was no vomiting, and the first meal was administered about twelve hours after the operation; it consisted of half-a-pint of milk with a beaten-up egg and two drachms of malt extract. Similar meals were given every four hours during the day, but before long the quantity was increased to a pint at each meal. Within a week his weight began to increase, and when he left the hospital three weeks after the operation he weighed seven pounds more than when he was admitted. To overcome the dryness of the mouth which is usually present in cases of gastrostomy, he was allowed a cup of tea at each meal; the greater part of this he swallowed, but some of it he spat out after rinsing out his mouth with it.

SPECIAL REPORTS.

THE EIGHTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT LIVERPOOL, 1912.

[Third Article.]

[By Our Special Representative.]

The Work of the Sections.

The work of the annual meeting was conducted in twenty sections, all of which were conveniently housed in the various buildings and class-rooms of the University of Liverpool. A brief summary of the more important proceedings appears below.

Section of Anæsthetics.

After the opening remarks of the President, Dr. Dudley W. Buxton, a discussion was opened by Dr. Felix Rood on intravenous infusion anæsthesia, describing his apparatus and *technique*. Mr. Alexander Wilson (Manchester) opened a discussion on the importance of affording the anæsthetist an opportunity of making a thorough examination of the patient some days previously to a contemplated operation. He contended that many difficulties would be avoided by a more intimate acquaintance between anæsthetist and patient. The intra-tracheal administration of ether was demonstrated by Dr. Ehrenfried (Boston, U.S.A.). The last morning was mainly occupied by a discussion on the use of alkaloidal bodies prior to inhalation, infusion or sub-dural injection, with a view to abrogating deleterious after-effects.

Section of Anatomy.

A discussion was opened by Sir William Macewen on the development and growth of bone, normal and abnormal. Among the interesting papers read on the second day may be mentioned those by Prof. Peter

Thompson (Birmingham) on the development of the diaphragm during the first month; by the President (Prof. William Wright) and Mr. R. G. Brown (London) on vestigial structures in relation to the epididymus; by Prof. Geddes (Dublin) on (*a*) an abnormal urinary system, (*b*) a case of pseudo-hermaphroditism, (*c*) an egg inside an egg. On the last day a combined discussion was arranged with the electro-therapeutical section on the normal stomach, which was opened by Dr. A. F. Hertz (London).

Section of Bacteriology.

A joint discussion was held with the Section of State Medicine on *B. Coli*, its varieties and the significance of their occurrence in water supplies, which was introduced by Dr. A. C. Houston (Metropolitan Water Board, London), Dr. Chalmers (Glasgow) occupying the chair. A resolution was passed to the effect that no opinion should be passed as to the quality of a water for drinking purposes on bacteriological evidence alone apart from a local and topographical inspection of the sources of supply by a competent observer. The second day was occupied with papers, among which may be mentioned that by Prof. J. M. Beattie and Dr. A. G. Yates on variations in the morphological characters of bacteria and their reactions with sugars under different conditions, and that by Prof. E. Emrys Roberts and Dr. S. B. Walsh on the Brownian movement, with special reference to the anthrax spore. A discussion took place on the last day on the standardisation and control of vaccines, which was introduced by Drs. J. Eyre and J. Freeman.

Section of Dermatology.

After a short address from the President, Prof. Walter G. Smith (Dublin), Dr. Arthur Whitfield (London) introduced a discussion on the nature, causation and treatment of seborrhœa and acne, the word seborrhœa being defined as "a secretion which leads to pathological complications." He was followed by Dr. P. S. Abraham (London), who laid stress on dietetic considerations and local treatment in acne. A valuable contribution towards the discussion by Dr Sabouraud (Paris) was translated and read by Dr. R. McKenna. On the following day Dr. Lucien de Beurmann (Paris) read an interesting and highly technical paper on sporotrichosis, embodying the results of his own researches into the ætiology and pathology of this disease. Dr. J. L. Bunch (London) followed with a paper on the treatment of nævi, based on 2,000 cases, and by Dr. J. Goodwin Tomkinson (Glasgow) on the use of the vacuum electrode in in névrodermite. Mr. J. R. McDonagh (London) read a paper on a rational method of treating syphilis. On the Friday, Prof. Madden (Cairo) started the proceedings with a paper on a case of papilliform lesions (? lymphangiomata) of the scrotum. Dr. David Walsh (London) followed with a paper on traumatic dermatitis and other cutaneous lesions in relation to cardiovascular conditions, illustrated by coloured drawings. He showed that many chronic and recurrent skin affections owed their existence to the presence, often totally unsuspected, of some cardiac lesion. Dr. Norman Meachen (London) followed with a paper on morbid conditions of the nails: a plea for their more systematic study. Dr. L. Savatard (Manchester) contributed two short papers on sebaceous carcinoma and sarcoma on lupus scar tissue. A note on a case of xanthoma was read by Dr. Oram (Liverpool). A number of interesting skin cases were shown each morning before the meetings.

Section of Diseases of Children, including Orthopædics.

The President, Mr. Robert Jones (Liverpool), called upon Mr. H. J. Stiles (Edinburgh) to open a discussion on the after-results of the major operations for tuberculous disease of joints. The importance of early diagnosis was insisted upon and the advisability of more extensive operative procedures was urged. He was followed by Messrs. A. H. Tubby, R. C. Elmslie, Douglas Drew, and others. A medical discussion took place on the following day on the dyspepsias of children after the age of infancy which was opened by Dr. Robert Hutchison, followed by Drs. E. Cautley, H. R. Hutton, D. Fordyce, Paget Lapage, F. Eve and others. A valuable series of papers occupied the time on the last day, among which may be mentioned that by Mr. W. S. Haughton (Dublin) on a recent case of Lorenz operation, demonstrating by X-rays the development of the acetabulum; one by Dr. Murk Jansen (Leiden) on physiological scoliosis, and that by Mr. Kellett-Smith on some principles of the treatment of lateral curvature of the spine by exercise.

Section of Electro-Therapeutics.

The proceedings were opened with an interesting paper by Professor Rutherford (Manchester) on the chemical action of the radiation of radium. He was of the opinion that actual radium or thorium salts should never be introduced unprotected into the system, but injections of water charged with radium emanations might be of great therapeutic value in a variety of morbid conditions. The rest of the morning was taken up with other papers on radium, Dr. E. Bellingham Smith (London) dwelling upon its physiological action on normal tissues and on cancer, a similar contribution being made by Mr. Ernest H. Shaw (London). Dr. W. Armstrong (Buxton) put in a plea for the radio-oxygen bath. Dr. Haenisch (Hamburg) read the first paper the next day on the X-ray treatment of uterine fibroids. A discussion then followed on ionic medication, opened by Dr. Lewis Jones. A contribution on the electrical treatment of the prostate gland was read by Dr. Snow (New York). On the last day a combined discussion took place with the anatomical section on the normal stomach, as mentioned above. This was followed by papers by Dr. A. C. Jordan (London) on peribronchial phthisis, by Dr. Hugh Walsham (London) on aortic aneurysm, and by Dr. E. Reginald Morton (London) on the X-ray diagnosis of some forms of arthritis, among others.

Section of Gynæcology and Obstetrics.

After a brief address by the President, Professor Henry Briggs (Liverpool), a discussion was opened on the results of treatment of the inflammatory diseases of the uterine appendages, Dr. W. S. A. Griffith dealing with the medical aspect, and Mr. Christopher Martin from the surgical standpoint, being followed by Drs. Munro Kerr, Nigel Stark, F. W. N. Haultain, Amand Routh, Mrs. Scharlieb, Sir John Byers, and others. A joint discussion took place next day with the Section of Pathology on Eclampsia in which the principal speakers were Dr. J. W. Ballantyne (Ætiology), Dr. J. H. Teacher (Morbid Anatomy) and Sir William Smyly (Therapeutic Applications of recent research on the subject), being continued by Dr. Haultain and Dr. Oliphant Nicholson. On the Friday papers were read by Dr. R. W. Johnstone (Edinburgh) on chorio-angioma of the placenta, by Sir John Byers (Belfast) on rashes occurring during the puerperium, among others.

Section of Medical Sociology

As might be expected, this section attracted large numbers, in view of the fact that subjects of vital interest to the profession as a whole were discussed therein. The President, Dr. J. C. McVail (Glasgow), having given a brief address, Dr. R. R. Rentoul (Liverpool) opened the first discussion on a public medical service under professional control, an abstract of which we hope to publish in our columns. Personally, he felt that better national results would be obtained if the Government made the employment of all doctors a branch of the Civil Service. He outlined a scheme for a public medical service, which he estimated would give each of the 20,000 doctors about £522 yearly, in addition to their public and other appointments, and if they could put a stop to the gross abuse of the voluntary hospitals this would add at least another £100 a year to the doctor's income. Unless they had the active co-operation of the staffs of the voluntary hospitals a public medical service would be a ghastly fiasco.

Dr. M. Dewar (Edinburgh) opened a discussion, limited to one hour, on the reform of hospital out-patient department, in the course of which he stated that the hospital motto, "Open to all," was a great injustice to the general practitioners of the whole country, as it had developed a system of competition between those institutions and medical men, and had gone a long way towards sapping the independence of the public.

On the next day, Dr. J. C. McVail (Glasgow) opened a discussion on administrative measures consequent upon the compulsory notification of phthisis, and after this another short discussion was arranged for, the opener being Dr. A. G. Gullan (Liverpool), who introduced the question of administrative provisions for the prevention of malingering. He was followed by Drs. M. Dewar and Edgar Browne, among others.

A discussion on payment of medical services by capitation *versus* payment per attendance under the National Insurance Act was opened by Dr. H. Harvey, who put in a strong plea for the former method. Other speakers included Drs. R. P. Cooper, A. Stewart, C. G. S. Fleming, J. E. O'Sullivan and H. D. Ledward.

Section of Medicine.

Dr. David Lees (London) opened a discussion on the diagnosis and treatment of early cardiac complications of rheumatism, being followed by Drs. Abrams (San Francisco), F. J. Poynton (London), Carey Coombs (Bristol), F. Langmead (London), J. Halls-Dally (London), and others.

On the next day a discussion took place on the pathogenesis, diagnosis and medical treatment of gastric ulcer, which was opened by Sir Bertrand Dawson (London), and continued by Professor R. Saundby, Professor Michell Clarke, Drs. Hertz, Bolton, Luff, Chalmers Watson, Tyson, F. J. Smith, and others. On the Friday a large number of interesting papers were read, including one by Majors Gibbard and Harrison, R.A.M.C., on the treatment of syphilis with salvarsan and neo-salvarsan; the quantitative regulation of the diet in diabetes, by Dr. P. J. Cammidge; demonstration of a more systematic posterior apical percussion and of the normal inter-spinous dulness as an aid to diagnosis, by Dr. William Ewart.

Section of Navy, Army and Ambulance.

After Colonel Damer Harrisson, K.H.S., A.M.S. (T.F.), the President, had opened the meeting, Capt. N. Dunbar Walker read a paper on factors affecting the marching powers of troops. He laid stress upon the fact that the load carried should not exceed one-third of the body weight. Subsequent speakers were Major-General Walter Lindsay, C.B., D.S.O., Surgeon-General W. Babtie, V.C., Deputy D.-G., A.M.S., Mr. T. S. Ellis (Gloucester), and others. A paper was then read by Fleet-Surgeon A. G. Wildey, R.N., on the more general use of iodine in first aid treatment. On the Thursday, Fleet-Surgeon A. W. Whitelegge, R.N., opened a discussion on eye-strain and its relation to gunnery, and Lt.-Col. Nathan Raw, R.A.M.C. (T.F.) read a communication on the treatment of syphilis with special reference to salvarsan.

Section of Neurology and Psychological Medicine.

Dr. Percy Smith (London) opened a discussion on the neuroses and psychoses of the climacteric, their prognosis and treatment, being followed by Dr. C. J. Macalister (General Medicine), Dr. T. B. Grimsdale (Gynæcology), the President, Dr. L. R. Oswald (Glasgow), Dr. Nathan Raw, and others. On the next day a discussion on compression paraplegia was opened by Dr. Ernest Reynolds and Sir Victor Horsley, followed by Drs. Risien Russell, Hinds Howell, Grainger Stewart, and Messrs. Donald Armour and K. W. Monsarrat, among others. Many interesting papers were read on the Friday, among which may be mentioned that by Dr. W. Maule Smith on the use of extract of brain tissue in the treatment of various forms of insanity; the results of the Wassermann reaction in 150 cases of mental disease, by Dr. David Nabarro, and the nature and treatment of epilepsy, by Dr. W. Alexander.

Section of Ophthalmology.

Mr. George Coats (London) opened a discussion on irido-cyclitis, with special reference to its pathology, being followed by Mr. A. W. Ormond (London), Prof. Snellen (Utrecht), Mr. C. Worth (London), Mr. Harrison Butler (Coventry), Mr. Bishop Harman (London), and others. Dr. Karl Grossmann read a paper on the new Board of Trade standard of eyesight for ships' masters and officers. Most of those who took part in the subsequent discussion agreed with the reader of the paper that the new standard for form vision was too low, and the proposed new colour tests were condemned. Dr. G. Mackay (Edinburgh) opened a discussion on the second day on tuberculin and the treatment of eye affections, followed by Dr. Peel Ritchie and Dr. Marple (New York), among others. Mr. Sidney Stephenson (London) opened a discussion on the last day on salvarsan in relation to eye affections, in which Dr. J. Igersheimer (Halle), Dr. Maitland Ramsay, Mr. S. H. Browning, and others took part. Papers were read by Dr. Inglis Pollock and Dr. Bradburn.

Section of Laryngology and Rhinology.

The President, Mr. Middlemass Hunt (Liverpool) sketched the progress of this speciality in Liverpool, after which Professor O. Kahler (Freiburg) read a paper on excision of the œsophagus. A lantern demonstration was next given by Dr. Brown Kelly showing the passage of bismuth down the œsophagus, with special reference to the question of cardiospasm. The subject was further discussed by Drs. S. W. Hill, Walker Downie, Adolph Bronner, and others. A joint discussion was held on the Thursday with the Section of Otology on the education of the specialist in laryngology and otology, opened by Professor H. Mygind (Copenhagen), and continued by Professor H. S. Birkett (Montreal), Dr. Watson Williams, and others. On the last day a discussion on the treatment of chronic suppurative disease of the ethmoidal sinuses was opened by Professor M. Hajek (Vienna), and was continued by Dr. W. L. Ballinger (Chicago), Dr. Lambert Lack (London), and others.

Section of Otology.

After some introductory remarks from the President, Mr. Hugh E. Jones (Liverpool), Mr. R. H. Woods (Dublin) opened a discussion on acute middle-ear suppuration, its neglect and proper treatment. He expressed a regret that the management of middle-ear conditions occurring in the course of the acute specific fevers was only imperfectly appreciated by the general physician. He was followed by Dr. Claude Rundle (Liverpool), Mr. W. M. Mollison (London), Professor Mygind (Copenhagen), Professor Ballenger (New York), and others. Dr. W. Milligan next read a paper on the value of decompressive operations in intracranial operations of otitic origin, with special reference to the treatment of otitic meningitis. A joint discusson took place the next day with the Section of Laryngology on the education of the specialist in laryngology and otology, opened by Dr. P. Watson-Williams. Dr. Kerr Love (Glasgow) read a paper on the prevention of deafness in non-suppurative cases, and Mr. G. J. Jenkins read one on the indications for Schwartze's operation.

Section of Pathology.

Professor Lorrain Smith, F.R.S. (Manchester) started the proceedings by opening a discussion on the morbid anatomy and ætiology of Bright's disease. In the unavoidable absence of Sir Clifford Allbutt, his paper on the cardio-vascular changes was read by the President, Professor Walker Hall (Bristol). Dr. W. H. Gaskell (London) showed several renal sections taken by the freezing method. He was followed by Dr. F. Craven Moore (Manchester), and Dr. T. Shennan (Edinburgh), among others. A joint discussion was held on the Thursday with the Section of Gynæcology and Obstetrics on eclampsia, as mentioned above. The last day was occupied with the reading of many valuable papers, among which that by Dr. T. J. Horder (London) on the investigation of puncture fluids as an aid to diagnosis and treatment, Professor E. E. Glynn (Liverpool) on blood cultures in disease; and one by Dr. C. Bolton (London) on the causation of gastric ulcer, may be mentioned.

Section of Pharmacology and Therapeutics.

Professor W. E. Dixon, F.R.S. (Cambridge) presided over this section and he announced the fact that for the first time a journal devoted entirely to pharmacology and experimental therapeutics would be published in this country, arrangements having been made with the "Journal of Pharmacology and Experimental Therapeutics," now published in America, to be issued simultaneously in New York and Cambridge under the joint editorship of Prof. Abel (Baltimore) and Prof. Cushny (London). Dr. A Goulston (Exeter) then read a paper on dextrose in the treatment of certain forms of heart disease, Dr. O. T. Williams (Liverpool) following with one on cod-liver oil and its action in phthisis. Prof. Charteris (Glasgow) then read a paper on a comparison of the value of arsenious acid and of salvarsan in blood and other non-syphilitic diseases, and Prof. Marshall (Dundee) followed with one on clinical experiences with tetrahydropapaveroline hydrochloride. A discussion on the treatment of heart muscle affections, apart from valvular disease, was opened on the Thursday by Prof. G. A. Gibson (Edinburgh) and Prof. Cushny, while the proceedings concluded with a discussion on the rôle of calcium salts as therapeutic agents, opened by Prof. B. Moore and Sir James Barr.

Section of Physiology.

The President, Prof. J. S. Macdonald (Sheffield) showed some interesting lantern slides on the various constituents of the blood, after which Dr. F. W. Mott, F.R.S. (London) opened a discussion on the biophysics and bio-chemistry of the neurone, followed by Prof. C. S. Sherrington, Dr. Wakelin Barratt, and Prof. A. B. Macallum. The next day a discussion was opened by Prof. B. Moore on the importance of substances present in minute amount in food, while a second discussion on tissue respiration was opened by Dr. H. E. Roaf (London). Dr. W. M. Vernon (Oxford) followed, dealing mainly with the process of oxidation and enzymes. The last day was occupied by the reading of papers, including those by Prof. C. S. Sherrington on some causes of uncertainty in reflex actions; observations on the production of apnœa, by Dr. T. H. Milroy; and remarks on the mechanics of progression, by Dr. T. Graham Brown.

Section of State Medicine and Industrial Diseases.

After the President, Dr. A. K. Chalmers (Glasgow) had delivered his opening remarks, a joint debate took place with the Section of Bacteriology on the *rôle* of the *B. coli* in water supplies, as mentioned above. A discussion on tuberculosis, together with the Section of Medical Sociology, was opened by Dr. J. C. McVail (Glasgow), followed by Dr Marcus Paterson, Dr. Wynne (Wigan), Dr. Crofton (Dublin), and others. Dr. Erskine Young (Liverpool) read a paper on the Friday on the treatment of dental diseases in school children, being followed by Dr. Sim Wallace (London) on the same topic. Dr. C. H. Philips opened a discussion on the value of isolation in scarlet fever, maintaining that until we ceased to mass patients in large wards, so long would the hospitals be a failure. A highly technical paper was read by Dr. J. S. Mackintosh on the effect of intramigration on national health.

Section of Surgery.

The President, Prof. Rushton Parker (Liverpool) delivered a few introductory remarks, after which Mr. Harrison Cripps (London) opened a discussion on the treatment of carcinoma of the rectum, being followed by Messrs. C. A. Morton, G. Heaton, Sampson Handley, C. P. Childe, Leedham-Greene, Jordan Lloyd, Albert Lucas, and others. Mr. Hurry Fenwick (London) opened a discussion on the diagnosis and treatment of tuberculous disease of the urinary tract, in which Messrs. D. Newman, W. Bruce Clarke, P. J. Freyer, A. Fullerton, Swinford Edwards, Hugh Lett, and others took part. On the Thursday Dr. F. W. Collison (Preston) demonstrated the electric lighting of a portable operating table or any domestic table used for operating. Among the papers read on the concluding morning may be mentioned that by Mr. J. F. Dobson (Leeds) on the treatment of gastric ulcer by excision and partial gastrectomy; the results of filagree implantation in hernia, by Mr. Lawrie H. McGavin; the surgery of the sacro-iliac joint, by Mr. W. J. de Courcey Wheeler, and one thousand cases of total enucleation of the enlarged prostate, by Mr. P. J. Freyer.

Section of Tropical Medicine.

Papers were read on the first morning on the subject of trypanosomiasis by Drs. Stephens, Fantham, Kinghorn and Yorke, and Professors Kleine and Mesnil Dr. Weinburg contributed a paper on verminous toxins, and Prof. Castellani one on copra itch. Papers on leprosy and Leishmaniasis occupied the second morning. On the last day the practice was adopted of inviting the attendance of representatives of several of the large business firms who have offices in Liverpool to a debate organised on the sanitation of agricultural estates in the tropics, opened by Dr. Malcolm Watson (Federated Malay States), who maintained that it should be the aim of medical officers to demonstrate to estate managers the fact that sanitation adapted to the needs of a tropical agricultural population pays handsomely. Dr. W. Carnegie Brown and Dr. Law (British Guiana) followed on the same subject, and Dr. Stephens, who, in the absence of Sir Ronald Ross, was in charge, conducted a party of visitors over the School Museum.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Aug. 3rd, 1912.

At the Medizinische Gesellschaft, Herr Richard Mühsam showed some cases of

Punctured Wound of the Brain,

and related some particulars concerning them. The cases were of interest, he said, not only on account of their rarity, but also on account of the very grave symptoms accompanying them and their rapid subsidence after operation.

As regarded rarity he observed that in the 22 years since the Moabit hospital was opened, with a great number of gunshot wounds of the skull only three cases of punctured wound had been admitted. The first was a case under Geheimrat Sonnenburg, the second under the speaker's predecessor Prof. Hermes, the third was a case of his own, and all three recovered after operation. In the large majority of cases of stabbing wounds of the head the brain was not injured, as the blow had not been sufficiently powerful to drive the knife through the bony walls.

The first case was that of a man of 26. Whilst in a drunken condition he had got mixed up in a fight, had received a stab with a knife in the region of the right parietal bone besides other injuries. He was said to have vomited, and from the accident station was sent into the hospital. He was a large, powerful man, very drunk, temp. 36.5, pulse 96. There was a punctured wound about 1cm. in length over the temporal bone; free from reaction, bruises on various parts of the head. The region round the wound moderately swollen, no sign of paralysis. Aseptic dressing applied. The next day the patient complained of headache, the pulse slowed to 60, left facial, left arm and left leg slightly paretic. Temp. at most 37.5. Three days later the paresis was better so that the patient could raise his arm.

The next day the paresis had returned with headache again, the pulse was tense between 60 and 70.

The day following, however, the symptoms were all worse again. In the morning the patient had a convulsion which was followed by many others, so that within one hour he had 15. At first only the left side was implicated, but later on the right also participated.

The X-rays showed a shadow (hæmatoma) beneath the puncture and an operation was immediately performed. Chroloform-ether narcosis was employed.

A splinter of bone was sticking in the dura, the brain substance not being punctured. The bone had been smoothly pierced by the knife. The dura was opened, and it was then found that the knife had penetrated the precentral gyrus, a quantity of blood and coagulum was removed; at a depth of 6 to 7 cm. the finger came to a cavity filled with clot. This was removed. The dura was then closed with the exception of a small slit through which a thin wick was inserted.

The next day (March 9th) the patient was much improved. On the 11th the patient had 10 typical attacks during the night, the tampons were removed, some blood still flowed, superficial dressing, after this no more attacks. Improvement was gradual and steady, and the patient was discharged on April 4th.

Case 2.—Patient admitted into hospital in a drunken condition November 4, 1891. The puncture was towards the back of the left parietal bone, passing through a very greasy hat and the bone of the skull. The wound was 2 cm. wide. No symptoms of cerebral disturbance present. No loss of consciousness. The next morning the patient's mind was clear, there was no vomiting nor any sign of paralysis, except for a complaint that the right arm felt weak; gait unsteady. The wound dilated and had been tamponaded on the patient's admission. At the operation it was seen that the wound had penetrated the brain itself, an opening about 1½cm. in length was in the dura mater, through which a greasy bluish-red coloured mass protruded. No bleeding was going on and only a small coagulum was removed. Disinfection of the parts was completed by the Paquelin cautery. Recovery was uninterrupted.

Case 3.—Patient, æt. 32, was admitted January 27th, 1905. In a fight his opponent struck him with all his force with a knife on the left side of the skull. An attempt to withdraw the knife was unsuccessful, so the man was at once taken to the hospital.

Condition: The pocket-knife was stuck fast up to the handle in the left temporal bone. Operation: Incision 12 cm. in length, periosteum raised. Now it was seen that the weapon had caused a fracture which did not end with the knife opening. The wound was enlarged with hammer and chisel, and the knife removed. It was then seen that the blade of the knife had penetrated 6 cm. Two pieces of the blade had broken off and were removed separately. The wound in the brain which pulsated rather strongly and bled rather freely was tamponed. An aseptic dressing was applied. With the exception that the temp. rose on one occasion to 40 and went back when a drain was inserted, everything went well, the patient being discharged on March 18. The further course was not quite so satisfactory, as there was a deep canal in the centre of the wound, from which came a discharge of pus. On stooping and on running the man complained of giddiness, with headache, and there was a distinct weakening of intellect.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

BELFAST.

Belfast Hospital for Skin Diseases.—The annual meeting of this hospital was held last week, when the medical staff report was presented by Dr. R. J. Purdon. It stated that the various appliances in use for the treatment of skin affections, lupus, etc., had been brought thoroughly up to date, and were giving most beneficial results. Dr. S. W. Allworthy also spoke of the work of the hospital, and referred specially to the large amount of tubercular disease treated, and the possible effects of the Insurance Act on such work.

Masonic Memorial to the Late Dr. Crossle, Newry.—A handsome brass tablet to the memory of the late Dr. Crossle was dedicated in St. Mary's Church, Newry, last Sunday afternoon, by His Grace the Lord Primate. The tablet, which was designed by Mr. J. Vinycombe, bears the inscription: "'Mark the perfect man and behold the upright, for the end of that man is peace.' In affectionate memory of Francis Clements Crossle, M.B., of Newry, who died on the 15th day of October, 1910, in the 64th year of his age. With strict integrity and with love and zeal for the good and welfare of the craft, he was over thirteen years Provincial Grand Secretary and for nine years Deputy Grand Master of the Masonic Province of Down. This tablet is placed here by the brethren of the province to commemorate the fraternal love and esteem in which they held him when living and to mark their sorrow at his death." His Grace gave an impressive address, and paid an eloquent tribute to the character of the late Dr. Crossle.

Tuberculosis and Public Health.—At the monthly meeting of the City Council held last week, Dr. Thompson, Chairman of the Public Health Committee, said that his committee had hoped to present to the Council a complete scheme for the prevention and treatment of tuberculosis. They had, however, to adjourn the matter for the present, as they had no power yet to spend a single penny for this work. Under the Tuberculosis Prevention Act of 1908 all expenses under the Act had to be defrayed out of the poor-rate, and at present the ratepayers are spending £18,000 a year in the treatment of tuberculosis—£15,000 at the Abbey Sanatorium, which is administered by the Poor-law Guardians, and £3,000 contributed by the Corporation to the Forster Green Hospital.

Queen's University Athletic Ground.—All old students and friends of Queen's will be glad to hear that after many years of difficulties and delays, the matter of an athletic ground has been settled, and that in a most satisfactory manner. The committee in charge has, with the permission of the Senate, purchased for the sum of £10,100, free of rent, the property known as Old Forge, about a mile and a half from the University and a few minutes from the Malone Road tram terminus. The property comprises 74 acres, including the old polo ground, and is eminently suitable for its purpose. The money is in hand with the exception of a few hundreds, which can easily be raised, and the students ought soon to be established in grounds which will have few rivals in the universities of Europe.

Death of Dr. James M'Ilroy, Ballycastle.—Widespread regret is felt in County Antrim at the death of Dr. James M'Ilroy, J.P., at the age of 67 years. He was born near Bushmills, in the north of County Antrim, and educated at Glasgow University, where he took the degree of M.B. in 1867. His whole professional life was spent in his native district, first for 22 years as Dispensary Medical Officer of Lavan, near Ballymoney, and then for 23 years as Officer at Ballycastle. Some six years ago he received injuries to his spine in a driving accident, and from these he never recovered, the end being due to septic trouble in the bladder and kidneys. He leaves a widow and four daughters, two of whom, Dr. Louie M'Ilroy and Dr. Jeanie M'Ilroy, have attained distinction in their father's profession in London and Glasgow. Dr. M'Ilroy was a personal favourite with rich and poor alike, and will be greatly missed in the county.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE ROYAL MEDICAL BENEVOLENT FUND.

To the Editor of The Medical Press and Circular.

Sir,—His Majesty the King has been graciously pleased to grant to the British Medical Benevolent Fund the title of Royal, so that it will henceforth be known as the Royal Medical Benevolent Fund.

I shall be much obliged if you will assist in making known this act of the King's grace towards this long established and well-deserving Charity.

I am, Sir, Yours truly,
Samuel West. Hon. Treasurer.
11, Chandos Street, London, W.
July 31st, 1912.

OBITUARY.

MR. A. T. NORTON, C.B.

It is with profound regret that we have to record the death of Mr. Arthur Trehern Norton, C.B., F.R.C.S., of Leyfields Wood, Ashampstead, Berkshire, one of the proprietors of the Medical Press and Circular, which took place on Sunday last in a nursing home at Reading, after an operation for appendicitis. The deceased, who was 71 years of age, was the second son of the late Dr. Robert Norton, and he married, in 1898, Lucy Maude, the eldest daughter of Mr. E. Meredith Crosse, of Newhouse Park, Herts. He was one of the founders of the London School of Medicine for Women, and a member of the War Office Committee for the development of the Volunteer Medical Service, with which he had a special acquaintance, having been Surgeon-Lieutenant-Colonel and Commandant of the London Volunteer Medical Staff Corps. He was made a Companion of the Bath in 1897 in recognition of his efforts in the formation of the corps. He also held the Jubilee Medal and the Volunteer Officers' Decoration. For his services in the Franco-German War he was awarded the French war medal in gold, having done excellent work with regard to the ambulance arrangements. He was an Honorary Associate of the Order of St. John of Jerusalem, and Consulting Surgeon to St. Mary's Hospital, as well as Lecturer on Clinical Surgery in the Medical School, and he acted as Examiner in Surgery for the Society of Apothecaries and Durham University. Among his published works may be mentioned "Osteology for Students" and "Affections of the Throat and Larynx," and he also dealt with the anatomy of the eye. He translated and edited "Bernard and Huette's Operative Surgery and Surgical Anatomy." He was a member of the Authors' Club.

DR. W. H. CARRUTHERS, OF RUNCORN.

The death has taken place with tragic suddenness of Dr. William Hodson Carruthers, of Halton, Runcorn. He was in the habit of doing his rounds in his motor car, and on the 22nd ult., he instructed his chauffeur on the way home to stop at the shop of Mr. J. H. Weston, chemist, Victoria Road. On arrival there, the chauffeur opened the car door, and, as the doctor did not immediately step out, glanced at him, and observed that his head had fallen on to his chest. Assistance was at once summoned, and the doctor was carried into a room adjoining the shop, but death had probably taken place before he was lifted from the car.

Dr. Carruthers was well known all over the countryside, in which his life was spent, and had the entire confidence of the people of Runcorn and the country gentry of the surrounding country. He was a son of the late Dr. Hodgson Carruthers, of Runcorn, formerly of Carlisle, and had practised locally for forty-five years. At one time he was house surgeon at Manchester Royal Infirmary. He was an M.R.C.S.Eng. (1867), and M.D.Edinburgh (1870). A man of great kindness of heart, he was beloved deeply by all sections of the community. The cause of death is assumed to be heart failure.

DR. T. KIRKWOOD, OF NEWCASTLE.

We regret to record the death of Dr. Thomas Kirkwood, which has taken place at his residence at Westmorland Road, Newcastle, aged 62. The deceased, who qualified as M.B., C.M.Glasg., was a native of Dalry in Ayrshire, where his father, Mr. Thomas Kirkwood, was a well-known merchant. His early education he received in the Free Church School at Dalry For a while, too, he was a pupil teacher in the school of his boyhood, and after that he studied at the Glasgow Free Church Normal Seminary, under the late Dr. Thomas Morrison. At the age of 20 he went as certificated assistant in the Glasgow Highland Society's schools, and taught there for two years. It was then that he resolved to follow the medical profession, and he went to Glasgow University where he worked under Dr. McCall Anderson, Sir George McLeod, and Sir George Buchanan. Having completed his medical training he acted as assistant in Fauld House, Lanarkshire, thereafter removing to Rutherglen, where he remained a few years, aquiring further experience. Twenty-seven years ago he came to Newcastle, succeeding the late Dr. Scott in Wesmorland Road, where he had lived ever since, carrying on a good class family practice in the city. Of a retiring disposition, Dr. Kirkwood lived in his practice, devoting himself wholeheartedly to it. He was held in high esteem by his medical brethren, with whom he was closely associated through the Clinical Society and the local branch of the British Medical Association. A Presbyterian, he was a constant attender at the Westmorland Road Church. Dr. Kirkwood leaves a son, and his wife predeceased her husband in October last.

REVIEWS OF BOOKS.

ANÆSTHETICS. (*a*)

The second edition of this little text-book appeared some six years ago, when it formed No. VII. of the "Medical Monograph Series." The favourable opinion expressed of the book at that time has been fully justified by the call for a third edition. In this edition the author has been able to effect some improvements, the chief change being in the description of the open method of administering ether. English anæsthetists never seem to have been so much at home with the use of this drug as have their colleagues in other countries. With the older methods of administration of ether it was quite possible to obtain almost uniformly bad results unless the anæsthetist had the experience necessary to master the rather difficult *technique* of its administration. With the open method, however, if one obtains an anæsthesia at all, it is likely to be good, and consequently we have great hopes that the introduction of this method will lead to the more general use of the drug in England, a course of procedure which has for many years been advocated in the pages of this journal. We congratulate the author on the success of his book and on the good work which has earned that success.

SEA-SICKNESS. (*b*)

This volume should be widely read, for the feelings and interests to which it appeals are thoroughly cosmopolitan. But we confess to having felt somewhat discouraged by the perusal of the first sentence of the preface, in which the words of our author are thus written: "Seasickness is ordinarily looked upon as a trifling ailment." Surely anybody who has even but *seen* the symptoms of the original *NAUS-ea* must feel convinced that the condition is hardly one that can justly be classified under the head of "trifling." And our American cousins have not only felt, but written upon the subject, both appreciatively and philosophically. Does not sea-sickness recall the amateurish therapeutics of "the common or garden" methods of curing a cold, one of the prescriptions of which made America's least mortal humorist reject everything removable from his person by the bucco-œsophageal route, except his eternal soul? And has not the most entertaining and popularly impressive of America's amateur cynics reminded his readers that sea-sickness is one of the very best temporary cures for "pride and impudence," by reason of the undeniable fact that "a man who is going to vomit never puts on any airs"?

The present booklet, which would appear to represent an effort to popularise the author's much larger work on the same subject, noticed a few weeks ago in these columns, presents its materials not only carefully and skilfully prepared, but lucidly

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(*a*) "Anæsthetics—A Practical Handbook." By J. Blumfeld, M.D.Cantab. Third Edition. 8vo. pp. vii. and 143. London: Bailliere, Tindall and Cox. 1912. Price 3s. 6d.

(*b*) "Sea-Sickness and Health: A Manual for Travellers." B. Joseph Byrne, A.M., M.D., LL.B. Crown 8vo. Pp. 128. London: H. K. Lewis. 1912. Price 4s. net.

written and arranged. The author takes as little as possible for granted. And his view point is succinctly formulated on pp. 36-7: "Without going into tedious details, it may be stated at once that the writer's experiments have shown very conclusively that sea-sickness is caused by repeated, irregular stimulation of the vestibular nerve. . . . . The special function of the vestibular nerve is the automatic (non-voluntary) control of movements involved in maintaining the equilibrium of the body." This appears to be a very reasonable view—in the light of our twentieth-century physiology. We are less disposed to take in prophylactic seriousness the following observations: "Sea-sickness is frequently aggravated and the attack prolonged by injudicious eating. At the commencement of the journey, and sometimes even during the progress of the illness, there is a tendency on the part of travellers to take too much food, or food that is improperly adapted to the needs of the occasion. In the height of their sea-sickness the author has seen individuals, mostly young women, eat oranges almost immediately after an attack of vomiting." We feel sure that the author is gifted with a Celtic imagination. He writes clearly and chooses his expressive words and phrases with judgment. His cognomen is distinctly suggestive of Hibernian lineage. And, if we are not always convinced by his opinions and the reasoning on which they have been based, we know of no physician who has published his views on this troublesome, and somewhat ungrateful, topic under whose professional protection we would so gladly cross the ever-narrowing "herring-pond" which unites the old country to the *Greater Ireland* of the Great Western Republic.

LETTERS OF WILLIAM HARVEY. (*a*)

William Harvey died on June 3rd, 1657, and year by year since that time the Harveian Lecturers have vied with each other in the relation and discovery of facts concerning the life and work of the great physiologist. In spite of all this labour and research, Dr. Mitchell has been able to publish for the first time some ten letters written by Harvey which are full of interest. The discovery of these letters is due to the work of the Royal Historical Manuscripts Commission, and it is to the courtesy of the Commissioners, through the good offices of Sir William Osler, that Dr. Mitchell has been able to issue them in their present form.

The letters date from 1636, when Harvey accompanied Lord Arundel on his embassy to the Palatinate. During this time Harvey obtained permission to visit Italy, but when he reached Treviso he was put in quarantine as one who was suspected of being infected with the plague. In these letters Harvey makes bitter complaints to Basil, Lord Feilding, Ambassador at Venice, of his treatment by the authorities at Treviso, of how he had to sleep on the grass, and was kept a prisoner though he had important business in Italy—treatment, too, under which he exhibited anything but the stoic temperament.

The bibliography compiled by Mr. Charles Perry Fisher, Librarian of the College of Physicians of Philadelphia, is a most valuable work, for which all medical historians are much in his debt.

SURGICAL TECHNIQUE. (*b*)

This book is divided into four parts, the first dealing with preliminary considerations, such as surgical bacteriology, infection, and disinfection. A special chapter has been added on the standardisation of disinfectants. Part II. deals with prophylactic disinfection. The author deals widely with the question whether gloves should be used or not when operating, and quotes the views of many well-known surgeons; he sums up his opinion in a sentence: "It is not essential for every surgeon to wear gloves when operating in 'clean cases,' but each surgeon must satisfy himself by experiments that the method of hand disinfection which he adopts is capable of securing practical disinfection of his own hands." Parts III. and IV. consider wound and operative *technique* respectively. The illustrations are simple and clear, and a good index is provided. The book should prove useful to senior students and those about to embark on surgical practice.

THE KING'S EVIL. (*a*)

English students of the history of medicine owe a debt of gratitude to the Fitzpatrick Lecturers for the works they have published since the establishment of these lectures. Not the least part of this debt is due to Dr. Crawford for the interesting book before us, which belongs to a good class of work and in that class takes a high place.

The story of the King's Evil and its cure by the Royal touch wanders through one of those many by-paths of medical history which are as full of interest as they are clouded by obscurity and error. For a long time it was believed in these countries that the power of curing the disease by touch was one of the prerogatives of our Royal house, transmitted by the saintly Edward the Confessor from king to king. In France, on the other hand, this faculty was looked on as the right of the Royal house of that country, a right which the English kings had merely borrowed from their Royal neighbours.

Dr. Crawford has been able to show that the custom is in all probability derived from the much older idea of the divine nature of healing in general, associated with the divine right of kings. Whatever may have been the origin of the practice, there is no doubt as to the extent of it in England and elsewhere. In England the practice continued down to the accession of the house of Hanover, when so much that was picturesque in the Royalty of England finally disappeared. Queen Anne was apparently the last English sovereign to exercise the Royal prerogative in this as in certain other particulars, and she is recorded to have "touched" Samuel Johnson, who "was then but thirty months old." Evidence has been adduced to show that the belief of the masses in the efficacy of the Royal touch was fostered and used for political purposes by those in high places, but that this belief was not confined to the masses is also evident from its adoption by such men as Robert Boyle and Swift, the latter of whom was an anxious suppliant for the Royal favour on a young protégé.

That cures followed this method of treatment is almost certainly true, and need excite no wonderment when we remember the results attributed to various quack remedies down even to our own times. Greatrakes, Mesmer, St. John Long, and a host of others could point to a lengthy list of successes in support of their claims to cure disease, and though these claims were contested by the faculty, and were in every case eventually shown to be largely exaggerated, still there remained a residuum of cures which could not be explained away. Although considerable progress has been made in psychology in recent times, this progress has not been anything like so rapid as has been the progress in our knowledge of the physical and natural sciences, and we are still far from being able to explain the interaction of mind and matter. Whether mental processes can directly influence physical processes is still in dispute, as indeed is the problem whether there is any absolute distinction between mental and physical processes.

While doubts exist on such fundamental points as these it is useless to hope to be able to explain how the mere mental influence, if one may use such a term, of one individual can modify the tissue changes of another. Experience seems to teach us that it can, but gives us no idea how it does so. In the presence

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(*a*) "Some recently discovered Letters of William Harvey with other Miscellanea." By S. Weir Mitchell, M.D. With a Bibliography of Harvey's Works by Charles Perry Fisher. 4to. Pp. 55 and 11 plates. Philadelphia: 1912. Transactions of the College of Physicians of Philadelphia.

(*b*) "Modern Surgical Technique in its Relations to Operations and Wound Treatment." By C. Yelverton Pearson, M.D., M.Ch., F.R.C.S., Professor of Surgery, University College, Cork, &c. Second Edition, revised and enlarged, pp. 484. Illustrated with two coloured and other plates, and 129 illustrations in the text. London: John Bale, Sons and Danielsson, Ltd. 1911. Price 10s. 6d. net.

(*a*) "The King's Evil." By Raymond Crawford, M.D. 8vo., pp. 187, with nine plates. Oxford: The Clarendon Press. 1911.

of so much ignorance one must be careful how one contradicts experience on mere *a priori* considerations of impossibility. A study of the book before us shows that, like ourselves, our forefathers felt that after the elimination of all the frauds and coincidences there remained a number of phenomena not explained by existing knowledge.

COMMON DISEASES OF CHILDHOOD. (*a*)

It must be distinctly understood that this is in no sense a text-book of children's diseases. It is rather a collection of articles on some of the commoner conditions met with in early life; and herein lies its great value to the practitioner, for within its pages are discussed subjects which, for lack of space or some other consideration, are either scantily treated or passed over altogether in the recognised text-books. Each chapter in this book is really an essay or article on some particular disease or morbid condition. In this way the author considers no fewer than fifty-three of the maladies incident to childhood, as well as some other topics such as infant feeding. The author very rightly condemns the use of barley-water as a diluent, and points out that it may be a cause of rickets, and not uncommonly gives rise to gastro-intestinal disturbances. He, therefore, favours plain water as the diluent in making up milk mixtures for infant-feeding. Raw milk must never be used, as the risks of tuberculous infection are always present. He says, in fact, that, as the result of his own observations, he finds that 29 per cent. of the cases of tuberculosis occurring in childhood are due to alimentary infection.

The subject of curd-indigestion is one of great importance, and this forms a special study in one of the chapters of this book. In the treatment of this condition Dr. Still recommends citration of the milk, or, failing that, peptonisation or feeding with whey. He does not condemn patent foods altogether. He thinks they sometimes have their place in infant feeding if intelligently employed. It is, perhaps, invidious to single out any particular chapter for special commendation where all are so excellent, but we must confess that the one dealing with tuberculosis is, in our opinion, the best in the whole book. It conveys to the mind of the reader a word-picture of tuberculosis as it is met with in childhood which is at once striking and unique.

The value of this book lies in the fact that it is an exposition of the writer's own experience, and the result of his own personal observations over a lengthy period. The book is, therefore, stamped with an originality rarely met with, which renders it of great service as a work of reference by students of pædiatrics.

In this edition several alterations have been made in order to bring the book into line with modern teaching; while minor additions have been made to the text which add considerably to its usefulness. The publication of a fresh edition within two years of the appearance of the first is in itself a proof of the service which the author has rendered to the profession in writing it.

AMERICAN MEDICAL BIOGRAPHY. (*b*)

Since William Munk published in 1861 his Roll of the Royal College of Physicians of London, which reached its second edition in 1878, no such book of medical biographies has, as far as we know, been issued in the English language. Dr. Kelly has been able to collect the biographies of some twelve hundred medical worthies of the United States and Canada, which, with many portraits, he has compressed into two handy octavo volumes.

Only those who have tried to collect information about the lives of those who are long dead can appreciate the great labour involved in such a work, and as one of those we tender to the author our sincere thanks. The articles, though brief, are not scrappy, and the information, as far as we have been able to test it, is quite trustworthy. In the introduction Dr. Kelly gives a short historical sketch of the growth of American medicine, contributed by various authors and interspersed with valuable bibliographical references.

The book is printed in clear type, and the illustrations are admirably executed. We congratulate all concerned in the publication of the work, which should find a place on the shelves of every medical library.

LABORATORY REPORTS.

CLINICAL USE OF JUNORA.

Reports have now been received from a number of practitioners upon the clinical use of Junora wine, good results having been obtained from its employment as a medium for administering the organic glycerophosphates of lecithin, in the treatment of many forms of malnutrition and nervous debility. It is claimed that in practice, as well as under analysis Junora exhibits several marked differences from ordinary medicated wines. Among the points of difference emphasised are the following:—(1) The basis of Junora is a dry wine, it being entirely free from the sweetness which so often leads patients into unintentional intemperance. (2) The principal effects of ordinary medicated wines are due to a high alcohol percentage, whilst the meat, malt or other nutritive constituents in some of them are almost negligible. Junora is an alcoholic beverage because alcohol is the only practicable solvent for lecithin; but the alcohol percentage is as low as is consistent with the preservation of the lecithin-products in good condition. (3) The phosphoric acid present in organic combination, to which the nutritive value of Junora is mainly attributed, is approximately 0.0241 gramme per 100 c.c. This represents one grain of lecithin per fluid ounce, and is sufficient to explain the claim made on behalf of Junora, that it is primarily a nutrient, in contradistinction to ordinary medicated wines, which are primarily stimulant.

NEW PREPARATIONS.

BURROUGHS WELLCOME'S "VAPOROLE" PITUITARY EXTRACT 0.5 c.c.

From the clinical point of view, one of the most notable results of the investigations on the internal secretions of the ductless glands has been the preparation and introduction into therapeutics of an extract of the infundibular portion of the pituitary body. Such an extract, when injected intravenously or intramuscularly, raises the blood pressure and keeps it raised, acts as a stimulant of plain muscle, particularly of the uterus, slows and strengthens the heart-beat and causes profuse diuresis. All these actions have been taken advantage of clinically, and the extract has been successfully used in shock, in post-partum hæmorrhage, and after labour generally, in cases of intestinal paresis and atony following operations, in typhoid and other fevers, and as a diuretic. In a large number of the cases recorded in the literature, the preparation used has been "Vaporole" Pituitary (Infundibular) Extract, a sterilised preparation issued by Messrs. Burroughs Wellcome & Co. This has hitherto been available only in quantities of 1 c.c., but as a result of its more extended use, and to provide further convenience in dosage, it has now been issued also in containers of 0.5 c.c. "Vaporole" Pituitary (Infundibular) Extract, 0.5 c.c., is packed in boxes of six hermetically-sealed containers, and, being sterile, is ready for immediate injection.

(*a*) "Common Disorders and Diseases of Childhood." By George Frederick Still, M.A., M.D. Cantab., F.R.C.P. Lond., Professor of Diseases of Children, King's College, London; Physician to the Hospital for Sick Children, Great Ormond Street. Second Edition. London: Henry Frowde and Hodder and Stoughton. 1912.

(*b*) "A Cyclopedia of American Medical Biography, comprising the Lives of eminent deceased Physicians and Surgeons from 1610 to 1910." By Howard A. Kelly, M.D. Illustrated with Portraits. In two Volumes. 8vo., pp. lxxxv., 424, vii. and 515. Philadelphia: W. B. Saunders Company. 1912.

Medical News in Brief.

The Royal Sanitary Institute Congress at York.

H.R.H. Prince Arthur of Connaught opened the Health Exhibition in the Exhibition Buildings, York, last week, in connection with the Congress of the Royal Sanitary Institute. His Royal Highness was received by the Lord Mayor of York (Alderman Norman Green), Chairman of the Local Committee of the Sanitary Congress, the Recorder of York (Mr. H. T. Kemp, K.C.), the Sheriff of York (Councillor J. B. Inglis), the Chairman of the Council of the Royal Sanitary Institute (Mr. H. Percy Boulnois), the Chairman of the Judges (Mr. W. C. Tyndale), the Town Clerk of York (Mr. Henry Craven), the Director and Secretary of the Royal Sanitary Institute (Mr. W. E. White-Wallis), the Local Secretaries of the Congress (Dr. E. M. Smith, M.D., D.P.H., Medical Officer of Health, and Mr. F. W. Spurr (City Engineer and Surveyor), and the Chairman of the Congress Committee (Mr. H. D. Searles Wood).

An address was presented to His Royal Highness by Mr. H. Percy Boulnois, Chairman of the Council of the Royal Sanitary Institute, to which Prince Arthur replied.

The work of the scientific sections began on the 30th ult., when the various Presidents gave their addresses, and many interesting and important discussions took place. In the afternoons visits and excursions to the various places of interest in the city and neighbourhood took place.

A Case of Plague in Liverpool.

It is reported that a boy, æt. 7, was admitted to the Royal Infirmary, Liverpool, on July 25th, and operated upon for supposed appendicitis. A gland was removed from the groin and was found to contain plague bacilli. This diagnosis has been confirmed at the laboratory of the Local Government Board. The source of infection cannot at present be stated definitely. All precautions are being taken to prevent the possibility of spread of the disease, and no further case has occurred. The patient came from the neighbourhood of the docks, where there was a likelihood of foreign rats having been brought in.

The Welsh National Memorial Association.

It is reported that peace has now been made between the British Medical Association and the Welsh National Memorial Association. The State Sickness Insurance Medical Committee of the British Medical Association have held an interview with Mr. David Davies, M.P., Mr. D. W. Evans (Hon. Secretary), Dr. Marcus Paterson (Medical Director), and Dr. W. E. Thomas (a member of the Executive Committee of the Welsh National Memorial Association), and in consequence all matters in regard to the Fund and doctors have been satisfactorily settled. It was stated that if the two doctors who had resigned re-applied they would be re-appointed under the Fund.

Torquay Carnival.

With the object of further popularising Torquay as a health and pleasure resort, the Corporation has arranged for a carnival to be held on August 17th. An installation of a variety of medicated baths is being established, and a new concert pavilion has been erected in the Princess Grounds at a cost of £40,000. This building will be opened on the day of the carnival with a concert given by an operatic party from the London Opera House, headed by Miss Felice Lyne.

Cure for Sleeping Sickness.

A recent telegram dated Berlin to a Liverpool journal announced that Professors Brieger and Krause believe they have discovered a permanent cure for sleeping sickness. The methods hitherto tried have proved effective only temporarily. Over a thousand experiments have been made on rats and guinea pigs with the new cure, and have proved its power. Practical tests are now to be made upon sufferers from the malady in German, British, and Belgian colonies in Africa.

London School of Tropical Medicine.

The following have passed with distinction the examination of the 39th session, May-July, at the London School of Topical Medicine:—Major W. P. Chamberlain (U.S. Army), M.D. (U.S.A.); Captain W. Lapsley (I.M.S.), M.B., R.U.I.; F. C. McCombie, M.D. (Lond.); Captain H. Emslie Smith (I.M.S.), M.B., Ch.B. (Aber.); Major H. R. Price (I.M.S.), M.B., F.R.C.S.E.; W. Allen (Colonial Service), M.B., Ch.B., D.P.H.; S. L. Brohier (Colonial Service), M.R.C.S., L.R.C.P., D.P.H.; W. J. Geale, L.R.C.P. and S.E.; J. E. L. Johnston (Colonial Service), M.B., B.S. (Lond.), M.R.C.S. L.R.C.P.; A. H. Owen (Colonial Service), M.R.C.S., L.R.C.P.; B. Spearman (Colonial Service), M.B., B.C. (Camb.).

Royal College of Physicians and Surgeons of Edinburgh and Royal Faculty of Physicians and Surgeons of Glasgow.

The following candidates have passed in the examinations held in Glasgow in July, for the triple qualification of the Royal Colleges of Physicians and Surgeons of Edinburgh and the Royal Faculty of Physicians and Surgeons of Glasgow:—

Final Examination.—L.R.C.P.E., L.R.C.S.E., L.R.F.P., and S.G.:—James Grant Morrin, Glasgow; Frank Walter White, Gosforth; Hormazd Ardeshir Topalia, Bombay; George William Mason, Pontypool, Mon.; Thomas Nicholson Wilthew Hexham; John Peter Carroll, County Cork; Joseph Moses Coplans, London; Leopoldo Cajitano Mascarenhas, India; Kul Want, India; Edward Charles Hamilton, Edinburgh; Furdon Framii Keravalla, India; Patrick Walsh, Kilfinane, County Limerick.

Conjoint Examinations in Ireland.

The following candidates have passed the summer examination of the Royal College of Physicians and the Royal College of Surgeons as undernoted:—

Preliminary Examination—F. J. Bowers, T. J. Clune, J. Cusack, J. L. Farnon, J. Geraghty, F. G. Hall, V. Hawkins, P. Hegarty, J. F. Holmes, L. B. Leonard, M. O'Donnell, M. P. O'Meara, W. Robinson, A. Y. Sloane, R. J. Tate, H. C. Williamson.

First Professional Examination.—Miss E. Budd (with honours), Miss M. McMullin (with honours), B. Hirson (with honours), T. S. Ambrose, H. M. Alexander, H. E. Andrews, D. Boland, M. Bradley, J. F. Coffey, T. Curran, E. C. H. Ewart, D. H. Ferris, J. A. Fretton, F. B. Harrison, H. Levison, E. McCarthy, T. F. Moran, C. Murray, J. P. Pegum, C. W. Robinson, J. P. Sheridan, G. C. L. Woodroffe.

Second Professional Examination.—J. C. Cunningham, J. C. Fergusson, F. Fitzgibbon, C. E. H. Gater, J. W. E. Graham, J. Hegarty, O. J. M. Kerrigan, W. Lumley, W. G. D. McCall, W. G. McConnell, F. R. H. Mollan, J. O'Brien, Y. A. Power, P. O'C. Redmond, L. M. Rowlette, T. Ryan, R. A. Ryan, T. H. Sarsfield, M. A. Sullivan, J. A. Watson, Miss M. F. R. Welply.

Third Professional Examination.—R. J. Brookes (with honours), J. Lanigan (with honours), R. A. Austin, H. A. S. Deane, G. S. Douglas, F. B. McTavish, J. J. O'Connell, H. O'Donoghue, J. J. Reynolds, M. Shipsey, F. M. Taylor.

Final Professional Examination.—W. I. Adams, P. J. Burke, U. L. Bourke, H. C. A. T. Cannon, W. H. Condell, M. Garry, J. Good, R. M. Gordon, R. F. J. Griffith, F. Hanigan, M. J. Hillery, J. M. Horan, W. H. Johnston, T. Kennedy, M. Meehan, F. P. McDermott, C. Molan, H. E. O'Brien, A. A. O'Connor, J. C. O'Farrell, A. J. Patterson, D. P. H. Pearson, J. B. Power, S. Punch, M. Quinlan, Miss B. Sieff, V. J. White, G. Young.

Examination for the Diploma in Public Health.—B. Flood, L.R.C.P. & S. Edin. (with honours); J. Ghosh, L.M. & S., Bombay; A. A. Gomes, L.M. & S., Ceylon; C. Greer, M.R.C.P.I., F.R.C.S.I. (with honours); M. E. Kayton, L.R.C.P. & S., Edin.; G. S. Levis, L.R.C.P. & S.I.; E. C. Mulligan, L.R.C.P. & S.I.; J. McKeague, L.R.C.P. & S., Edin.; N. R. Ussher, L.R.C.P. & S.I.; W. Venables Williams, L.R.C.P. & S., Edin.

NOTICES TO CORRESPONDENTS, &c.

CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

M.B.Glasg. (London, E.).—It has been clearly shown that uncultivated typhoid bacilli die more rapidly in raw water than their cultivated relations. Dr. Houston has also proved that "even a week's storage of raw water is an enormous protection, and less than a month's storage an apparently absolute protection against typhoid fever."

PUZZLED.—Proptosis of the left broad ligament has been recently assigned as a cause of constipation in women. Accompanying this are such signs as left iliac pain, increased by exertion, flatulent distension of the abdomen, occasional passage of mucus per rectum and gastric disturbances.

INTERNATIONAL CONGRESS OF OBSTETRICS AND GYNAECOLOGY IN BERLIN.

The proceedings of this Congress will commence on Monday, September 9th, when the International Organisation Committee meets. The discussions will commence on the Tuesday, and will continue until the following Thursday. Full information may be had from the Honorary Secretary to the Congress.—Dr. E. Martin, Berlin N., 24, Artillerierstr. 18.

POST-GRADUATE (Southend).—The Assistance Publique of Paris comprises thirty-one hospitals, aggregating 15,584 beds, which total is nearly doubled on adding the orphan asylums, etc., so that there is an abundance of clinical material available for clinical instruction.

G. P. (N. Devon).—Hypodermic injections of pituitrin have been used with great advantage in labour, the third stage of which is said to be materially facilitated without the occurrence of uterine relaxation. In 21 cases in which it was employed by Fries it invariably succeeded in increasing the strength and effectiveness of the pains.

MR. S. R. (Hereford).—The sale of sweets containing a syrupy liquid enclosed in chocolate, in which capsicum was found, was withdrawn after representations had been made to the manufacturers. It is most undesirable that any pungent drug of this nature should enter into the composition of sweets sold to children.

A YEAR'S WORK AT DAVOS.

At the ninth annual general meeting of the supporters of the Queen Alexandra Sanatorium at Davos, held the other day, it was stated that Lord Balfour of Burleigh, the President, was preparing an appeal for extra funds, as fewer patients were resident in summer than in winter. The enlargement of the sanatorium, in accordance with the wishes of the donor of £25,000, had been commenced. Dr. Barker, who had recently returned from a visit to Davos, had reported favourably upon the general condition of affairs in the sanatorium, but he regretted that too much economy had to be practised with regard to medical records of research work.

DR. H. L. McC. (Little Grosvenor Street, W.).—Your paper was unavoidably crowded out at press, but it is marked for speedy insertion. The alteration has been made as requested.

DR. V. PLETH (Mexico).—The new blood-counting pipette described by Mr. D. Thomson in THE MEDICAL PRESS AND CIRCULAR for April 24th, No. 3807, may be obtained from Messrs. Baker, 244, High Holborn, W.C. The price, we believe, is 10s. 6d.

Appointments.

ARMOUR, DONALD, F.R.C.S.Eng., Surgeon to the West London Hospital.

ATKINSON, J. A., M.B.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Newnham District of the county of Gloucester.

CLEMENTS, J. H., L.S.A.Lond., Medical Officer to the Winkleigh District by the Torrington Board of Guardians.

D'ESTERRE, J. NORCOTT, L.R.C.P.Lond., M.R.C.S., L.S.M.S.A. Lond., Registrar to the Kensington and Fulham General Dispensary, Earl's Court, S.W.

DOUGLAS, W. R., F.R.C.S.Eng., Assistant Surgical Officer to the Manchester Royal Infirmary.

EDWARDS, F. S., F.R.C.S.Eng., Consulting Surgeon to the West London Hospital.

GRAY, H. TYRRELL, F.R.C.S.Eng., Assistant Surgeon to the West London Hospital.

HOWELL, C. M. HINDS, M.D.Oxon., F.R.C.P.Lond., Assistant Physician to Out-patients at the National Hospital, Queen Square, W.C.

JONES, F. WOOD, M.B.Lond., Lecturer and Head of the Department of Anatomy at the London School of Medicine for Women.

MACDONALD, S. G., F.R.C.S.Eng., Surgical Registrar to the West London Hospital.

WILLIAMS, IDWAL J., M.B., Ch.B.Liverp., Assistant Resident Medical Officer to the Mill Road Union Infirmary, Liverpool.

Vacancies.

Down District Lunatic Asylum.—Junior Male Assistant Medical Officer. Salary £130 per annum, rising by annual increments to a maximum of £150 per annum, with extras. Applications to the Resident Medical Superintendent, Downpatrick. (See advert.)

Nottingham General Dispensary (Branch).—Resident Surgeon. Salary £180 per annum; Assistant, salary £160 per annum, with apartments (not board), attendance, light and fuel. Applications to C. Chessman, Secretary, 12, Low Pavement, Nottingham.

Staffordshire County Asylum.—Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board and washing. Applications to the Medical Superintendent.

Nottingham General Hospital.—Senior House Surgeon. Salary £120 a year, with board, lodging and washing in the Hospital. Applications to the Secretary.

City of Birmingham.—Assistant Medical Officer of Health. Salary £250 per annum. Applications to the Medical Officer of Health, the Council House, Birmingham.

County and City Asylum, Powick, Worcester.—Junior Assistant Medical Officer. Salary £150 per annum, with board, furnished apartments, washing and attendance. Applications to the Medical Superintendent.

Royal Victoria Infirmary, Newcastle-upon-Tyne.—Resident Medical Officer. Salary £200 per annum, with board and residence. Applications to the House Governor and Secretary, Royal Victoria Infirmary, Newcastle-upon-Tyne.

District Infirmary and Children's Hospital, Ashton-under-Lyne.—Senior House Surgeon. Salary £120 per annum, and fees, board, apartments and washing provided. Applications to the Honorary Secretary, Leonard Bottomley, Esq., M.A., LL.D., 120, Stamford Street, Ashton-under-Lyne.

Births.

DICKINSON.—On July 29th, at Grey Friars, Hereford, the wife of Harold Bertie Dickinson, M.D., F.R.C.S., of a daughter.

MELLANBY.—On July 28th, at 25, Ellerker Gardens, Richmond, Surrey, the wife of John Mellanby, M.D., of a daughter.

SHORE.—On July 30th, 1912, at Byron's Lodge, Granchester, Cambridge, the wife of Dr. Lewis Shore, of a daughter.

Marriages.

BOOME—OLIVER.—On July 31st, at St. John-the-Baptist's, Woking, Edward James Boome, M.B., son of James Boome, of Kensington, to Dorothy Arkcoll, daughter of the late Russell Oliver and of Mrs. Russell Oliver, of Grey Walls, Hook Heath, Woking.

CLARK—SYLVESTER.—On July 16th, at St. John's Church, Bulawayo, Rhodesia, William Gladstone Clark, M.A.Cantab., F.R.C.S. England, eldest son of the late James Proctor Clark, to Rubina Elizabeth Jeanette (Ruby) Sylvester, only daughter of Mrs. A. G. Hay and of the late A. J. Sylvester, and stepdaughter of Alexander Graham Hay, of Bulawayo.

KAY—KIDSTON.—On July 31st, at St. Mary Boltons, South Kensington, Charles Wallace Kay, L.R.C.P., L.R.C.S.Edin., L.R.F.P. and S. Glasgow, of Lymington, Hants, only son of Lieut.-Colonel Alfred Goodwyn Kay, R.A.M.C. (retired), to Hamilton Marjorie Bruce Wallace, only daughter of the Rev. John Wallace Kidston, of 6, Priory Grove, The Boltons.

MARSHALL—AINSLIE.—On July 31st, at St. Peter's Church, Peebles, Legh Richmond Herbert Peter Marshall, M.D., only son of the late Henry Marshall, M.D., F.R.S., of Clifton, to Frances Marion, second daughter of Mr. C. A. Ainslie, J.P., Swinton Bank, Peebles.

Deaths.

BENTHALL.—On August 3rd, suddenly, at Staplake, Starcross, Devon, Winfred Benthall, M.B., late of Derby and Breadsail, aged 58.

BUCHANAN.—On August 1st, at Kirkgate, Thirsk, Walter Isaac Buchanan, aged 43.

GARDNER.—On August 1st, at The Cottage, Brockenhurst, suddenly, T. Fred Gardner, M.D., M.R.C.P., of The Moyne, Boscombe Spa Road, Bournemouth.

NORTON.—On August 4th, at Reading, after serious operation, Arthur Trehern Norton, C.B., F.R.C.S., of Layfields Wood, Ashampstead, Berks, aged 71 years.

WALKER.—On July 29th, at Hundleby House, Spilsby, J. West Walker, Esq., M.B., J.P., aged 83.

WHITE.—On August 1st, the result of an accident, Howell H. White, M.B., C.M.Edin., M.R.C.S., of Corwen, N. Wales, aged 60

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, AUGUST 14, 1912. No. 7.

NOTES AND COMMENTS.

The Manchester Election Result.

DAY by day the influence of the medical profession upon the affairs of civil life appears to be growing steadily. As a collective body, medical men are now more united than ever before, especially with regard to conditions of medical practice as likely to be affected by the National Insurance Act. It is, therefore, a most significant fact that the Unionist candidate for North-West Manchester was returned last week by the substantial majority of 1,202. This complete turn-over from the Liberal cause must have been due, in no small measure, to the united action of the local medical men who issued a determined manifesto against the working of the medical benefits under the Act. No other conclusion can be drawn than that the voice of the profession in a large and important constituency has made itself heard with good effect and has been instrumental in securing the return to Parliament of the man whom they judged the best able to represent their views.

The Phantom Pool.

IT cannot be said that much headway has been made on the side of the Government during the last few weeks with regard to meeting the just demands of the medical profession on the question of the medical attendance of insured persons under the National Insurance Act. For the sake of doing something, apparently, Mr. Lloyd George has elected to contribute an article to the "Medical Supplement" of the *Nation* upon "The Medical Profession and the Insurance Act," which, upon the face of it, looked promising. Upon a careful perusal of this latest communication of the Chancellor our feelings resembled those of the traveller in the desert who suddenly realises that the refreshing pool from which he had hoped to quench his thirst is but a mirage. The fatal policy of delay and uncertainty on the part of the Government, which led to the final decision of the Liverpool meeting of the British Medical Association, is still persistently adhered to by Mr. Lloyd George, who, while hoping that the machinery of the Act may be "properly used by the profession, with the help of the great multitude of people who sympathise with their desire to improve the conditions of medical service in this kingdom," comes no nearer the removal of the existing *impasse* than in any of his former utterances. The promised regulations, shortly to be published, are, he states, so flexible that all necessary safeguards for the proper conduct of medical practice will be provided. When they appear the medical profession will be able to judge how far they will be able to carry out the duties involved. Meanwhile, no time must be lost in perfecting the organisation of a public medical service professionally controlled.

An Attack on Hospitals.

THE medical profession has always been a favourite butt for malign attacks, while "hospital scandals" are seized upon as prize tit-bits by the sensation-mongers of Fleet Street. The majority of these attempts to injure the reputation of medical men and institutions consist of gross misrepresentations of facts which a little explanation clears up at once. Many of the statements, not intentionally deceptive, when duly analysed, are utterly without foundation, but, since their perpetration only serves to prejudice the unthinking classes against hospitals, it is necessary to point out in what direction these errors lie, so that the true condition shall not be wilfully obscured by avoidable misunderstandings. In the July issue of *Cassell's Magazine* appears an "outspoken" article entitled "The Scandal of our Hospitals," in which the author, whose name (or pseudonym) is unknown to us, makes certain grave charges against the modern hospital, more especially in regard to the methods of giving medical instruction to students and to the treatment of out-patients. We consider it our duty to refer to this article, which is not quite the kind of thing we should have expected to find within the covers of a high-class monthly magazine, in order to correct some of the unpleasant impressions left by its perusal. We pass over such allegations as patients being "the victims of surgical science," "mauled about by incompetent youngsters," and "herded together like cattle in cheerless places to wait the convenience of the little medical gods who condescend to see them —at their leisure."

Fact and Fiction.

SUCH shafts of criticism fall harmlessly to the ground and need not be considered seriously. When we go on to read, however, of the number of deaths that are alleged to result from "sheer experiment," that the meanest advantage is taken of poverty, that common ailments are neglected in favour of rare cases, and that economy is practised upon the patients, it is only right that some steps should be taken to verify or disprove the truth of these wholesale assertions. There is a sense, of course, in which every form of medical treatment is an experiment, since there is always some unknown quality to be reckoned with in the patient, but this is a fact the truth of which is difficult for the public to appreciate. As for poverty being taken a mean advantage of, there is not a hospital in the land where the poorest beggar does not receive the same medical and surgical treatment that would be given to a millionaire in time of vital need, though no one expects dietetic luxuries nor every expensive refinement of synthetic drug-therapy in ordinary hospital practice. As to common maladies being neglected for out-of-the-way diseases, it is the experience of all medical men that it pays best to study everyday and minor complaints most carefully, since these comprise the bulk of the cases met with in general practice. If practical medicine is not to be learned by "living lessons for medical students," it is difficult to see how the knowledge of disease could ever be attained at all. As a matter of fact, patients do not object to being lectured upon, provided that it is not over-done. We agree that a lack of sympathy with human suffering is a deplorable thing, but happily it is not a common trait among those who have spent much time within the walls of a large hospital. It is appropriate, perhaps, that such an article as this, full of rash generalisations and unsubstantiated assertions, appears in a magazine of "fiction."

The Domestic Flea at Home and Abroad. Now that all the world is on holiday there are certain inevitable experiences appertaining to the sojourning of the traveller in strange abodes. Amongst these is the domestic parasite, the house flea, which is wont to haunt berths on board ship, a certain type of lodging house and the baser kinds of caravanserai. In some countries, such as Spain and Egypt, fleas are universal in their distribution. Some travellers are able to scoff at this little parasite, inasmuch as they are immune to its bite—while in others it causes the greatest physical dread and banishes sleep. Curiously enough, the explanation of this personal vulnerability has not yet been ascertained by modern medical science. On the other hand, scientific medicine has identified the flea as the active agent in the transmission of various infectious maladies, of which plague may be taken as the first discovered and most important. From this point of view the bite of the lodging-house flea assumes another aspect, for in addition to the mere inconvenience of an irritant wheal there is the possibility that the proboscis of that particular insect is charged with the virus of some more or less potent malady. In many other directions the material history of *pulex irritans* is interesting and suggestive.

The Pulex Family at Home. In the bedroom which represents the wide, wide world of some humble lodging-house flea, it rears its family, which goes through the stages of ovum, larva and pupa, chiefly in the cracks between the boards. As a matter of fact the flea is a model parent and attends faithfully to the nurture of the little white grubs in their home upon the floor. This habitat of the younger generation explains why fleas do not flourish in rooms that are under the care of a vigorous and thorough housewife. Not only is a remorseless war waged against the fleas themselves, but existence is rendered well nigh hopeless for the younger brood, who are scourged out of every snug retreat by soap and water and brushes and beatings of carpets and rugs and so on. The presence of fleas connotes slack and slothful housewifery. That is the last word on the matter. Fortunately, the modern fashion is to have polished and impermeable floors with rugs and carpets that can be frequently aired and cleansed. Perhaps, after all, it is well that the traveller should be reminded of the evils which affect the outside world.

The Recent Celluloid Fire. It is to be hoped that the fatal celluloid blaze in the City of London —upon which we commented last week—will not be allowed to pass out of recollection after the fashion of a nine days' wonder. Another of the girls who jumped from the roof has died since the main inquest, so that another chance has been afforded to a City jury to express their views upon the general question of celluloid and its dangers in crowded centres of population. Since our last issue several questions have been put to Mr. McKenna, whose answers on behalf of the Home Office have been of an unsatisfactory nature. Surely he could not have read any full report of the City Inquest held by Dr. Waldo, or he would hardly have said there had been no dereliction of duty on the part of the Home Office. He admitted there was a technical fault in the omission of the inspectors to see that the word "exit" was put up. Can he explain why none of the inspectors was informed that No. 21, Moor Lane, one of the largest celluloid factories in the Kingdom, was described under "Christmas Cards," and why not a single factory inspector knew, after a personal visit, that celluloid was used on the premises? Can he say why a register is not kept of celluloid factories? Can he say why Dr. Whitelegge's memorandum of draft advisory regulations was not brought to the attention of Messrs. Angus Thomas or any of their employees at 21, Moor Lane, where the fire took place? Last, but not least, can he inform the public what steps have been taken by the Home Office to carry out their undertaking to maintain the fire exits and other fire precautions provided by the London County Council? It is to be hoped that some Member of Parliament will inform himself as to what took place at the City Inquest, and will insist on something more satisfactory than a whitewashing official answer from the Home Office.

LEADING ARTICLES.

THE RELATIONS OF PRESCRIBER, DISPENSER AND PATIENT.

According to the best traditions of medical practice the rule has always been held inviolable which regards as sacred the relations that exist between the physician and his patient. Nothing should occur to mar the confidential sanctity, as well as the sacred confidence, that pertains to the very atmosphere of the consulting-room. Here, at least, the patient should be free to unburden his mind, without let or hindrance, to one who will not only listen sympathetically, but who will keep inviolate his patient's secrets. Neither the officious interference of friends and relatives, however well-meant, much less the intrusion of anything approaching to officialdom (*pace* Mr. Lloyd George), must be allowed to disturb this essential feature of medical consultation. Once this is destroyed, or even weakened, the Hippocratic oath, to which every practitioner worthy of the name has subscribed in spirit, if not in word, becomes as a thing of nought. It is most fervently to be hoped that this peculiar relationship will never be broken as a direct or indirect consequence of the working of the National Insurance Act. If the position of the prescriber is responsible, no less so is that of the pharmacist, and the relations between these two individuals, in the interest of the patient, are also to be regarded as sacred. In the able and thoughtful paper read before the recent British Pharmaceutical Conference on the mutual relations between the physician, chemist and patient, by Mr. J. Rutherford Hill, Ph.C., the point is rightly insisted on that the dispenser should regard the prescription as a confidential document, and that he should not divulge its contents nor explain the uses of its various ingredients to the patient. It is, of course, as much outside the province of a dispenser as that of a hospital nurse to criticise the prescription as a form of treatment, and we are glad to think that such a thing is extremely rare. In the case of an error of dosage or an incompatibility, chemical or therapeutical or both, in the prescription, it is the plain duty of the dispenser to communicate privately with the prescriber. When the latter is inaccessible and the case is one of urgency, no little responsibility devolves upon the chemist, and he would be, under these special circumstances, perfectly justified in modifying the prescription to the best of his ability and knowledge in the interest of the patient, and he will lose no time in acquainting the physician with the full facts of the case. Needless to say, no indication of any difficulty must appear manifest to the patient. Mr. Hill very properly condemns the practice of the keeping of prescriptions by dispensers for the purpose of recommending them to other persons presumably suffering from the same illness. Similarly, copies of the prescription should not be tendered to the friends of the patient on request, for no practitioner likes to feel that there is even the least possible chance of his professional skill being exploited. The plan of endorsing a prescription with the words "Not to be repeated" has much to commend it. There is no doubt that a greater co-operation between medical practitioners and dispensing chemists and the exercise of mutual tact and forbearance would go far to prevent many of the small frictions which occasionally arise. Mr. Hill's interesting and instructive paper is published in full in the *British and Colonial Druggist*, August 9th, and we are confident that its perusal will be found most profitable to medical men and pharmacists alike.

CURRENT TOPICS.

Lunacy Commissioners' Report.

The Annual Report of the Commissioners in Lunacy has now been issued. The Report deserves lengthy notice, but it may suffice for the present to state that a searching analysis is given of the incidence of insanity in the sexes. It is affirmed that there are certain conditions in the life history of most insane persons which have had definite relation to the attack that has accompanied or followed them. Of cases in which an insane heredity was considered a foremost factor, the proportion of females was 59 per cent.—considerably higher than that given on the total admissions. Dr. Mott in his exhaustive inquiry, appended to the Report, into the family histories of inmates of the London County Asylums, points out that among the offspring of insane parents, daughters are much more numerous than sons—viz., in the proportion of 292 to 208. These figures show that the female sex in a stock is more liable to become insane. In cases with a family history of alcoholism, the proportion of females was 53, being two above the mean. In a total of 411 cases the period of puberty and adolescence was specially noted as an important factor, and here again the proclivity was more marked in the female sex (56). Sudden stress was recorded in 35 males as compared with 65 females. Prolonged stress likewise appears to be a more frequent precursor of insanity in females than in males, namely, 45 males to 55 females. Intemperance in alcohol was considered as a principal factor in nearly as many cases as was prolonged mental stress, but here the male cases were more than twice as numerous as the female—namely, 68:32. Syphilis as a chief factor was noted in the proportion of 87 males to 13 females. Injuries were likewise far more common as antecedents in males (80) than in females (20). Amongst other "causal conditions" is influenza, where the female sex slightly predominate (53); epilepsy, where the female percentage (44) was much below the mean; and anæmia, where this was very high (79).

External Hydrotherapy in Tuberculosis.

The hardening as well as the tonic effect of the daily cold bath, or even of the lukewarm rubbing down of the entire body, is well known to athletes and others who derive benefit from the practice. That the external application of water, under scientific control, may be beneficial in cases of tuberculosis is not so fully recognised. According to Dr. Simon Baruch *(a)*, of New York, the graduated application of cold water does not depress the vital powers, as is sometimes popularly held, but, on the contrary, is capable of influencing for good many cases of phthisis when used in an intelligent manner. He has employed water below the skin temperature as part of the routine treatment of pulmonary tuberculosis for the past forty years, having given over 50,000 treatments. No violent cold douching is employed, and the first stage of the application consists in rubbing the body with water at 90°, drying thoroughly. The temperature of the water is reduced two degrees daily until 60° is reached. Friction and slapping with the hands are employed when the patient is enwrapped by a drip-sheet at 80°. After thorough drying, gentle exercise is taken. Ergographic trainings show that muscular vigour is increased after judicious cold water applications. Dr. Baruch points out that this system of "neurovascular training" is quite "fool-proof," and that it can be carried out equally well in the patient's home as in an institution. One great advantage of external hydrotherapy over more active muscular exercise is that there is no disturbance of the respiratory processes which would prejudice the consumptive.

The Edgar Allen Institute at Sheffield.

The introduction of the Swedish system of movements and massage as an adjunct to medical and surgical treatment has proved to be of the greatest help in the restoration of muscular tone and the completion of convalescence. Professional masseurs and masseuses are attached permanently to the staff of some of the hospitals, and they are able to render good service in suitable cases. Little has been done, however, to bridge over the gap that exists between the hospital ward or out-patient department and ordinary working life in the case of those who cannot avail themselves of convalescent home treatment. The Edgar Allen Institute, founded at Sheffield last year, is designed to supply this need in the case of that great centre of industry. Through the munificence of the founder the institution has been most expensively equipped with all the latest appliances and apparatus for assisting patients, mostly of the wage-earning class, to return to their work after injuries sooner than they could otherwise do. A great many of the cases treated are referred to the Institute from the various hospitals, whose good work is thus supplemented and confirmed. According to the annual report which was presented the other day at the first annual meeting, the Institute has been most successful, and it is satisfactory to note that it meets with the cordial approval and support of the medical profession in Sheffield. Other large centres might follow this lead with great advantage.

(a) *Medical Record*, July 27, 1912.

Labour Troubles and the Public Health.

That the recent industrial disturbances have not been without their effect upon the public health is evident even to the most casual observer of social matters. Those who have a more intimate acquaintance with the sanitary aspect of strikes know full well the miseries wrought by want of work and the lack of food, especially among the women and children. Occurring at a time of the year when epidemic diarrhœa is rife and when it is most essential that no decomposing food of any kind should be sold, it is a wonder that more illness has not resulted from this deplorable state of affairs. In his annual report of the health of the City of Liverpool during 1911, Dr. E. W. Hope makes special reference to the condition of things last summer in that city, when all the best efforts of a well-organised sanitary staff directed towards the prevention of infantile mortality were greatly upset by the labour troubles, the interference with the food-supply being one of the earliest acts of the strikers. The work of street scavenging, of such vital importance in hot weather, was also hindered, and the accumulation of refuse threatened at one time to be a grave menace to the public health. The natural consequence of these wanton checks to sanitation was an outbreak of infantile diarrhœa which only slowly subsided. In spite of great drawbacks, Dr. Hope is to be congratulated upon the promptitude with which sanitary measures were undertaken, for were it not for the unexpected check of last summer, the death-rate of Liverpool would, doubtless, still continue to show the progressive decline which it has done for a number of years.

Eugenics and Population.

A correspondent of the *Times* contributes some suggestive facts based upon a census made by himself of the offspring of relatives, friends, neighbours and acquaintances. These represent that prudent class of the suburban population who generally marry late, go up to London on business every day, and earn from £300 to £1,000 a year. The youngest man on the list is about 35 years of age, the oldest about 55. The result is as follows:—One couple with 8 children, three couples with 6, two with 5, five with 4, seven with 3, twenty-four with 2, sixteen with 1 child only, and twenty-eight with none. Thus 172 people have begotten 141 children, although it has been thought well to allow nine more to cover possible additions to actual families. These figures show a decrease of population of 13 per cent. There must, however, be taken into account that in this class there would be perhaps one in four who, through death, emigration or celibacy, contribute nothing to the population, whose number should be added to the total of married persons so that the proportion of adults to offspring is as 229 is to 150, or a decrease of 34 per cent. As, however, this decrease in reproduction has required a period of rather over a decade and a half the decrease per decade is more than 34 per cent. It is worthy of note that in only two cases have childless couples resorted to adoption (of relatives). With most of the others parental affection would appear to be satisfied by the adoption of dogs.

The New Milk and Cream Regulations.

On Tuesday in last week, the Local Government Board issued a circular dealing with "The Milk and Cream Regulations, 1912," recently made under the Public Health Act, 1907. The regulations are designed to secure that no preservative shall be added to milk, or to cream containing less than 35 per cent. by weight of milk fat. In the case of cream containing over 35 per cent. of milk fat, the addition of boric acid, borax, or of hydrogen peroxide is not prohibited by the regulations, but is subject to a system of declaration required to be followed by persons dealing with cream for the purpose of human consumption. It is intended that preserved cream shall be differentiated from cream to which no preservative has been added. Further, the addition of any thickening substance to cream or preserved cream is prohibited. The duty of administration has been placed upon those bodies who are local authorities under the Sale of Food and Drugs Acts. These regulations seem very wise as far as they go. From the public health point of view it would be infinitely better if they could be extended to prevent the sale of "dirty" milk, against which at present no effectual administrative powers are available.

Flannelette.

We have repeatedly drawn attention in these columns to the evils brought about by inaccurate and fallacious trade descriptions of goods. People of intelligence must recognise the fact that the mass of the population obtains its information regarding any article principally through the advertisements thereof; and in all classes of society there is a pathetic belief in the truth of the printed word. Since these things are so, it is the duty of our legislators to see that false assertions, which, taken as true, may have detrimental effects, be eliminated under penalty from advertisements. It has been abundantly proven that many varieties of flannelette described as "safe" are not safe, but deadly. And when we hear that in nine months 133 lives have been lost in the United Kingdom through inflammable flannelette, we heartily endorse the petition for legislation which is to be presented to the Home Secretary by a distinguished company of medical men and others. It is requested that a provision should be added to the Merchandise Marks Act, making it penal to describe as uninflammable any material which will not stand certain prescribed tests, and that the nature of these tests should be made public. Such a measure would necessarily help in the evolution of a really safe flannelette and be the means of saving many lives.

Medical Reports on Injured Persons.

A deputation of the Irish Trades Congress, which waited recently on Mr. Redmond, brought forward a point to which, perhaps, due attention has not been paid by medical men. It is a common practice for employers generally, and insurance companies in particular, to apply to one of the medical or surgical staff of a hospital for a report on the condition of some patient in whom they are interested. The deputation contended that such reports were often furnished without the knowledge or consent of the injured party. The relationship between the hospital physician and the patient under his care is exactly the same as that between the private practitioner and the patient who pays regularly for attendance. Any practitioner who made a report on a private patient without the knowledge and consent of the latter would rightly feel that he had infringed his position of confidential adviser and been guilty of a breach of professional etiquette. It is natural, therefore, that hospital patients should object strongly to such a procedure where they are concerned, and we are glad to see that due publicity has been given to the matter. On the other hand, we do not believe that such practice has been at all widespread, nor do we think that in those cases in which it has occurred the hospital surgeon has realised that he was acting in any way prejudicial to his patient's interests. Mr. Redmond was asked to support the appointment of a Departmental Committee to inquire into this matter in its relationship to the Workmen's Compensation Act. We are sure, however, that nothing further is necessary than to draw the attention of the members of hospital staffs to the subject.

Death Certificates.

We published in our last issue a forcible paper by Dr. McWalter in favour of having an autopsy in every case of death. Without adopting all the author's arguments, we are in entire accord with his demand. It is true that even the most careful clinician who follows his cases to the *post mortem* table finds innumerable errors of diagnosis. Moreover, he finds numerous points cleared up which were inexplicable from the merely clinical point of view. It is in this way that knowledge grows. From the statistical aspect, we fear it is true that records kept as they are at present are only of use in the most general sense. We do not think that the certificate of the cause of death is so frequently erroneous as Dr. McWalter suggests, but nevertheless, there is little guarantee that it is correct. At best it is a good guess. The cause of death should be made a matter of certainty. The present position is entirely absurd, in that the so-called "death certificate" does not even certify the fact of death. The whole matter of death certification needs reform. The fact of death should be certified by a medical man who has at any rate viewed the body, while the cause of death—if statistics on the point are to be of any use—should be verified by an autopsy.

The Domestic Storage of Food.

One of the most important factors in the causation and spread of epidemic diarrhœa in the summer is the lack of proper accommodation for the storage of food, especially in smaller houses and tenement dwellings. The subject was brought up before the Section of Domestic Hygiene at the recent annual meeting of the Royal Sanitary Institute at York, when Miss F. I. Lansdowne, Chief Woman Inspector, Leeds, pointed out that in numbers of flats she had visited the only place where food could be stored was the cupboard by the fire or else in the cellar. It cannot be said that either of these is ideal, under existing conditions, for keeping such food as milk, butter, or meat. Milk, if clean on arrival, is often received in a jug or basin which is dusty or dirty, or soured from the previous day's supply. It is then frequently set aside anywhere, perhaps on a window-sill or shelf, where it is left uncovered and exposed to the dust and dirt of the house and street. In the course of the discussion, Dr. Collingridge remarked that all the care and attention of the local authorities in the examination of food was often entirely annulled by the arrangements for the storage of food in the house. Where ground-floor accommodation for a pantry cannot be obtained, small portable ventilated larders might well be provided for attachment outside a window, with suitable wire-sieve doors, tightly fitting, to exclude dust, preferably with a north aspect. More attention should be paid by builders of houses to the adequate supply of cool pantries where food may be stored without fear of external contamination.

PERSONAL.

H.M. the King has been pleased, on the recommendation of the Secretary for Scotland, to approve the appointment of Dr. Ashley Watson Mackintosh, M.A., M.D., to be Regius Professor of Medicine in the University of Aberdeen, in the place of Professor David White Finlay, resigned.

H.M. the King has been graciously pleased to sanction the following promotions in, and appointments to, the Order of the Hospital of St. John of Jerusalem in England (August 5th):—To be Knights of Grace, John William Springthorpe, M.D. (from Hon. Associate), Lieut.-Col. Sir Joseph Fayrer, Bart., M.D., F.R.C.S. Edin. (late R.A.M.C.), and Major Charles Alfred Hodgetts, M.D., L.R.C.P., A.M.S. Canada (from Esquire).

Dr. Purves Stewart, M.D., C.M.Edin., F.R.C.P., has been appointed Physician to the Westminster Hospital.

Mr. Henry C. Bazett, M.B., of Wadham College, Oxford, has been appointed to the Radcliffe Fellowship, 1912.

Dr. Agnes F. Savill, M.A., M.D., M.R.C.P.I., has been appointed Honorary Physician to the London Skin Hospital, Fitzroy Square.

Mr. Godfrey Brookes Dixon, M.R.C.S., L.R.C.P., L.S.A., has been appointed Principal Sanatorium and Tuberculosis Officer to the City of Birmingham.

Dr. Robert Donaldson, M.B., Ch.B.Edin., F.R.C.S.Edin., D.P.H., has been appointed Pathologist and Bacteriologist to the Royal Berkshire Hospital.

Mr. W. Fitzpatrick, L.R.C.P. and S.Edin., L.F.P.S.Glasg., of Ashburton, Devon, was presented the other day with a purse of gold and an illuminated address upon the occasion of his retiring from active practice owing to ill-health.

Dr. J. Bowen Jones, of Pontycymmer, S. Wales, was the recipient of a case of surgical instruments and a purse of gold the other day upon the occasion of his leaving the district and as a token of esteem and respect in which he was held by all classes.

Mr. J. M. Cotterill, M.B., F.R.C.S.Edin., has been appointed Consulting Surgeon to the Edinburgh Royal Infirmary. The Managers of the institution at their last meeting recorded their sense of gratitude to him for his valuable services to the Infirmary, and they accepted a portrait of Mr. Cotterill, presented by forty-one of his former Resident Surgeons, to be hung in one of the wards.

A CLINICAL LECTURE
ON
OTHER DISORDERS OF IMPEDED RESPIRATION. (*a*)

By MAYO COLLIER, M.S.Lond., F.R.C.S.Eng.,

Late President of the British Laryngological, Rhinological and Otological Association; late Professor of Comparative Anatomy and Physiology at the Royal College of Surgeons, England.

GENTLEMEN,—In my last lecture, I had the honour to place before you some results of impeded respiration, more particularly of that part known as the upper respiratory tract, and I drew your attention to the fact that most of the common deformities of the face, upper jaw, teeth and palate were due to this cause. I also proved, I hope to your satisfaction, that the common disfigurement known as asymmetry of the nose could, in most cases, be traced to inequality of the functions of the two openings of the anterior nares, as inlets to inspiration. With your permission, I hope to-day to place before you other disorders and deformities due to impeded respiration.

Now, gentlemen, you may probably think that I have loaded the conscience of respiration with too many sins already, but when I tell you that there is no limit to the functions of respiration, in like manner you may conceive it possible that there is no limit to the ills that follow any impediment to this function. The terms respiration and life are interchangeable. Respiration is the one cardinal feature of life.

There is no life without respiration—no respiration without life. This animate world is a breathing world. Everything alive breathes, and there is no life without breath. Shakespeare puts this self-evident or axiomatic truth in more charming words than I can.

I think I may be excused for repeating them, for evidently the great poet was not only a poet and philosopher but a keen observer of the more common and more beautiful fact of nature.

In the play, "King Richard III.," he makes the Duke of Gloucester, who is bewailing his deformed and undeveloped stature, say :—

"But I, that am not shap'd for sportive tricks,
Nor made to court an am'rous looking-glass ;
I, that am rudely stamp'd, and want love's majesty,
To strut before a wanton ambling nymph ;
I, that am curtail'd of this fair proportion,
Cheated of feature by dissembling nature,
Deform'd, unfinish'd, sent before my time
Into this *breathing* world, scarce half made up,
And that so lamely and unfashionable,
That dogs bark at me, as I halt by them."

This is indeed a breathing world. And I conceive it to be perfectly correct, if indeed sometimes impolite, to reply to the questions as to what so and so may have died of, to say, "Want of breath."

Now, I think it will not be impolitic of us before we go into the great task of inquiring what are the ailments, disorders and deformities of impeded respiration if we refresh our memories with the many and manifest duties with which this great function is burdened. We can here and now ask ourselves the question :

What are the functions of respiration? and if we know what these are, we have half answered the question of what are the disorders of impeded respiration.

Long before a heart existed in any living individual the world was teeming with life. The heart plays very much a second fiddle to respiration, and but for respiration could not perform its duties for many seconds together. You will know that the act of inspiration assists the right side of the heart to fill itself and the left to empty itself.

When Professor of Comparative Anatomy and Physiology at the Royal College of Surgeons, I delivered some lectures at the College, and I venture here to state that none of my contentions have been disproved. I pointed out a fact previously unknown: that the pressure in the portal vein was always a negative one.

This truth was obtained from actual experiments many times repeated, and with the same result.

The act of inspiration sucks the blood out of the inferior vena cava and portal veins and, at the same time, by squeezing the abdominal contents, squeezes the blood onwards in the portal circulation. It is the old story, suction and force, acting simultaneously, takes the place of a heart for the circulation of the abdominal contents.

Without this the portal circulation would be at a standstill.

Again, our nutriment is bodily sucked into the tissues by the act of respiration.

Inspiration sucks it in and expiration accelerates the flow of blood in the capillaries, so that they take up more readily the fluids and particles that are passing through the tiny openings and passages in the epithelial coverings or mucous linings, as the case may be.

Without respiration, not one single particle of fluid or solid would pass out of the alimentary canal into the tissues, except by the law of diffusion.

With this fact established, it is clear that individuals of sedentary habits, or those whose dress impedes their respiration, and those who from any reason, nasal obstruction, defective muscle development, or disease, are likely to suffer from indigestion, slow digestion, fermentation, distension, gas formation in the stomach, dilated stomach, and all these and many more ills, simply from the fact that the contents of the stomach have not been properly sucked out and squeezed out by the efficient act of respiration.

A man talks about his liver being congested, of flatulence, of a distended and pendulous belly, of piles, of constipation. What else does he expect? Respiration is capable of carrying on his digestion perfectly, of carrying on his portal circulation perfectly, but he won't use this agency. He prefers to respirate only sufficiently to oxidise the blood inefficiently and no more, and then he wants to take drugs as a substitute for respiration.

When you disobey the laws of nature, there is no short cut to health, no sovereign cure, not even a two guinea cure. There are no medicines that will do for you what respiration will do. You are asking the impossible. In most cases medicines are a relic of barbarism, a relic of the old ages, of the time of the medicine man. They are the outward symbol of fraud and deception. They are the weapons of the quack and impostor, the patent medicine man, the man who guarantees to cure anything or everything by pills composed of bread or some similar innocuous substance. "Populus vult decipi."

The public love to take something in the way of medicines. They love to be deceived. Consequently the honest man often fails and rogues prosper.

And, gentlemen, this is all due to the fact that we don't understand a few simple facts about ourselves such as I have related to you.

Now we come to another point, quite as simple and quite as interesting. The part played by the heart in respiration.

If you will take up the morning papers, you will see that a good percentage of the deaths recorded are attributed to heart failure.

(*a*) Lecture delivered at the London Polyclinic Post-Graduate College.

The poor heart is entitled to stop when its chief motor agent, respiration, is treated so scurvily.

The heart is, I remind you, for all practical purposes, a pump—a double pump, or rather two pumps in series. The auricles count for next to nothing, and the right heart acts with the left and helps it, and the left acts with the right and helps it. Each is dependent on the other for its proper efficiency, two hearts or two pumps are quite requisite, one for the lungs, and one for the rest of the body. The keynote is suction and force. The right heart sucks and then forces, and the left heart sucks and forces.

The forcing of the right heart is linked up with the suction of the left heart.

The right heart forces the blood into the lungs and the left heart sucks it out.

But what would happen if the circulation in the lungs were entrusted to the heart alone?

The many disturbing influences that affect the heart discount its power as a motive agent.

A person in a dead faint would soon be cyanosed but for the guardian angel that ever watches over our good.

Respiration comes to the rescue. The blood can only pass one way and the compression that results from the recoil and collapse of the chest during expiration carries on the circulation quite efficiently.

You know that during a prolonged and serious operation when the heart is scarcely acting at all and the pulse is only flickering, the patient remains alive, and not only alive, but of good colour. This is due to respiration.

Respiration says to the failing heart, "You are tired; let me have a turn," and as long as the heart is moving at all, the circulation is carried on efficiently enough to oxidise the blood and preserve the life of the individual.

I said just now the auricles count for next to nothing. The only part of the auricle of any importance is the auricular appendix. This closes the tricuspid and mitral valves immediately before the systole of the ventricle. Each ventricle fills by the aspiration of its elastic muscle wall, just as an indiarubber ball expands after you have squeezed it. By the dilatation of the ventricle, the parachute-like valves separate from the walls of the ventricle and approximate one another.

Towards the end of the diastole, the auricular appendix suddenly contracts and shoots its contents between the rapidly-closing valves, increasing the pressure on their under surfaces and so closing them.

The heart then has a friend in respiration who can and does help it, at all times, but in case of emergency can practically take its place.

It is quite simple and easy to understand that if the whole work of the circulation is entirely placed upon the shoulders of a weak or enfeebled heart by ignoring the assistance of respiration, it may stop suddenly, as we often find to be the case.

Again I may remind you that in cases of suspended animation from drowning, artificial respiration is not only able to carry on the circulation, but is able to carry on the circulation without the smallest aid from the heart. Respiration then is able and does on occasion take the place of the heart when it fails from any functional cause.

Now let us come to another function of respiration, the oxidation of the constituents that form the heat and maintain the life of the individual. An exactly similar process takes place in the grate when the fire is lit or when a candle burns. Now a fire may burn too quickly or too slowly, and so in the animal economy. The fire may burn too fast from too much oxygen or air, or may burn slowly from too much fuel or not enough oxygen. These conditions are all found in the animal economy. I venture to say that a large percentage of the ills that fall to the lot of mankind are due to the latter condition. Too much fuel, not enough oxygen.

What about gout, with all its attendant tribe of aliases?

Now let us formulate this proposition in simple terms.

Heat production is due to the oxidation of the carbohydrates, hydro-carbons and albumens of the tissues.

Efficient oxidation, as in the fire, results in the formation of CO_2 and water, and in man and other animals urea and small quantities of uric acid and other products. These are the waste products of combustion and are easily got rid of, both in the fire and the human body.

Inefficient oxidation, both in the fire and the human body, leads to the formation of waste products, not volatile and not soluble, and so they remain and act as impediments to further oxidation, and ultimately put out the fire.

Now is not this an exact picture of the gouty and sedentary human fire?

So as not to strain your credulity, I will remind you of a familiar picture you have all seen many times, and one which is the very best object lesson I can place before you of the effect of impeded respiration on the human body—a child or young person suffering from the effects of adenoid vegetations in the post-nasal space, so impeding the inlet of the air or impeding respiration. Look at the picture.

Pale face, with characteristic stupid expression and half-open mouth, listless, lazy and wanting in energy. Cannot give attention to anything for more than a few moments; lolls about, sleeps late in the morning, complains of headache and more or less frequent attacks of bleeding from the nose.

The nose is, more or less, always obstructed, and the individual is constantly using his handkerchief.

There may be, and most often is, deafness, associated or not with running from the ears. In a large percentage of cases there is well-marked amyl dyspepsia with distension after meals and flatulence.

If you look at the body stripped, you find general anæmia and want of development. The muscles are wasted and flabby. The boy stoops badly, the back is rounded. The scapulæ stand out like two wings, and the shoulders consequently fall forwards. The chest in front is flat and depressed, and the cartilaginous margins of the ribs are often turned outwards. There is often pigeon breast. Now look at his abdomen; it is thin. The liver may be, and often is, enlarged, and the colon is mostly full and distended; in other words, there is chronic constipation. Now turn him round and look at the back.

Rub your finger down the spinous processes of the vertebræ and you will see the red line produced is not straight. There is some degree of lateral curvature of the spine. Now look at his legs and feet. There may be, and often is, some degree of flat foot. The epiphyseal cartilages may be enlarged; the tibia and femur may be bent and the inner condyle of the femur prominent.

There may be then commencing rickets and genu valgum. If you inquire of the mother or nurse, she may tell you the boy has nocturnal incontinence of urine and has had a fit or two.

Now this is not all romance. You know as well, or better than I can tell you, that every one of these symptoms may be present in various combinations when the respiration is impeded by post-nasal growths. Look on the reverse side of the coin.

Remove the post-nasal growths and restore respiration. Treat the defects efficiently and in three to six months, every trouble has vanished, like snow before the sun. It is not a case of *post hoc ergo propter hoc*, it is cause and effect. Even to-day, even in this year of grace 1912, you will find some ignorant and presumptuous persons who say they have been warned by their doctors not to have tonsils as big as duck eggs removed and not to have adenoids removed for fear of some chimerical harm that nobody has ever seen or ever heard of.

Air and light are requisite to all animal and vegetable life, and only the baser forms of life as represented by some germs delight in darkness and foul air.

The protective forces of nature are proof against all the attacks of germs provided the tissues are not vitiated or weakened by auto-intoxication by the formation of some poison generated in the tissues and as constantly produced as excreted.

Before I finish this lecture, I have brought some original diagrams here illustrating the most important facts of the circulation.

I must give you an illustration. You know the sounds of the heart. There are two in each cycle of events and the first is produced at the mitral and tricuspid orifices, and the second at the semilunar aortic and pulmonary valves.

Will you note I said at the orifices. Now if I canvassed this meeting, I feel sure there are very few here who could give me a correct answer to the question: What are the causes, the essential causes of the first and second sounds of the heart?

All the old notions of the sounds of the heart being due to the sudden closing, like slamming a door, of the valves, were childish and indefensible nonsense and founded on ignorance of the commoner laws governing the movements of fluids in closed canals or tubes under pressure.

The very idea of a back current in the aorta was ridiculous; you can only get a backwash in liquids where gas or air is floating on them. As a matter of fact, all the valves close quite gently. The last drop of blood that enters the aorta or ventricle remains at the point of apposition of the three or two valves as the case may be. At the moment when the last drop of blood has entered the aorta or ventricle, the pressure above and below the valves is equal.

The moment when the ventricle begins to contract, a sudden great pressure is thrown upon the under aspect of the tricuspid and mitral valves and the pressure above is entirely relaxed.

The same at the aortic orifice, but later.

The moment of commencing diastole of the ventricle, the pressure on the upper surfaces of the valves is great and there is no support below rather a negative or minus pressure from the active dilatation of the ventricle. This then is the cause of the two sounds of the heart, sudden stretching of the valves from sudden loss of support on the auricular and ventricular surfaces respectively resulting in a sound that may be exactly imitated by suddenly stretching a piece of cotton or silk handkerchief laterally, when the same sound is produced.

Now another point. You know the sinuses of Valsalva. Well, Valsalva first described them, and naturally wanted to know what they were for.

Of course, the ridiculous theory of a backwash that closed the valves was made use of, and this backwash was reflected outwards on to the walls of the aorta and formed these bulges by pure wear and tear, so that if a man only lived long enough, he would have three bulges as big as an orange or a football at the root of his aorta or, in other words, three aneurysms.

If you went to an engineer and asked him to make you a valve like the semilunar he would be bound to put a bulge there to ensure that the valve could not line the wall of the circular aortic tube. If it did you could not get it down again when once thrown up. The pressure would be always on its under surface. Then, again, another point. The function of the auricular appendix. We have been treated to all sorts of romances about the functions of these cocked hat like portions of the auricles with the wonderful provision for some great effort, as shown by the powerful ribs or rows of muscle fibres in the interior, the musculi pectinati.

Now I have watched these structures at work for hours, and I have watched the auricle as a whole, and the great veins at work and had a manometer in the body of the auricle all the time. The only part of the auricle that contracts forcibly is the auricular appendix and its function is seeing that it is situated immediately above the mitral and tricuspid orifice, to shoot its contents into the ventricle, to close the tricuspid and mitral valves previous to the systole of the ventricles. Without these (by some termed useless ornaments or appendices) regurgitation would take place into each auricle on contraction of the ventricle.

Just one word more, and then I have done.

The pulse has been the cause of much speculation. I can quite understand that many of the theories regarding the pulse have arisen from the notion prevalent with the earliest anatomists, that the arteries contained air. The arteries were always found open and empty when cut across in the cadaver and nothing was easier than to talk about a wave of blood passing along an empty tube. Unfortunately for this theory, the arteries are always full and over-distended and the blood is under considerable pressure, and any given particle of blood can only be displaced or pushed on by the particle next to it, and this by the one next to it and so on *ad infinitum*. It is much the same as if the aorta was filled with minute marbles.

When the ventricle contracts it would shoot its contents into the centre of the first few inches of the elastic aorta and distend only this part. The valves being closed, the reaction of the aorta would distend another section and so on to the smallest capillaries.

The pulse then is due to the distension of the aorta by the ventricle and the reaction of the elastic tube distending section after section of the artery to its finest ramifications.

This causes the appearance and feel of a wave passing from the heart to the periphery.

I end my lecture by advising you, as the Ancients did: γνοε σεαυτον—Know thyself.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Dr. Pierre Lereboullet, Medicin des Hopitaux de Paris. Subject: "The Treatment of Biliary Vesicular Colic."*

ORIGINAL PAPERS.

EPIDEMIC GASTRO-ENTERITIS.

By H. L. MacCARTHY, M.A., M.D., D.P.H.,
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Few features of urban mortality have received from sanitary experts more studious attention than the annual recurrence, with varying intensity, of epidemic gastro-enteritis in infants and young children.

Bacteriological investigation has shown that the disease is invariably associated with the presence of micro-organisms, but it is not now seriously maintained that any one form of organism is specific. With existing knowledge it seems probable that there are many varieties of organisms which, in favourable circumstances, may multiply in the gastro-intestinal tract and produce toxins capable of giving rise to the diarrhœa and other features associated with the disease.

Undoubtedly the nature of the child's food is of supreme importance. Holt (1) found only 3 per cent. of breast-fed infants amongst nearly 2,000 cases of fatal diarrhœa. It is known that an average sample of milk, as delivered to the urban consumer, contains nearly four millions of micro-organisms per c.c., and that in summer this figure is often greatly exceeded. Apart from the fact that milk forms such an admirable nutrient soil for the development and multiplication of bacterial life, other factors are considered of importance in relation to the great frequency of gastro-enteric disease among bottle-fed children. The tendency of recent research has been to emphasise the differences in the relative absorbability of the albumens of the two kinds of milk. It has also been suggested that the disease often results from a disturbance of balance between food elements taken into the alimentary tract and food requirements, not only in regard to quantity, but more particularly in regard to the relationship of individual constituents. Any disturbance of balance among the food elements prevents assimilation and allows bacterial action to begin, with consequent decomposition and absorption of toxins. Thus Finkelstein and Myer (2) succeeded in causing diarrhœal disorders in healthy children by increasing the salts and sugars, and attributed this result to the fat in presence of an excess of salts and sugar.

Another view is that the diarrhœa is merely a symptom of the defence reaction of the organism, and is caused by the irritation of the intestinal mucosa by the acids resulting from the decomposition of the fat or carbohydrate of milk by bacteria, such decomposition taking place almost wholly prior to administration. This theory is based upon the experimental work of Bokai, published in 1898, which showed that various acids resulting from food decomposition can produce not only diarrhœa in animals, but in small doses a catarrh of the intestinal mucosa, and in large doses even inflammatory changes. As lactic acid is harmless to the infants' intestine, the pathogenic properties must be associated with the acids arising from the decomposition of the fat.

The marked prevalence of gastro-enteritis in the third quarter of the year is to be attributed to the influences which then favour the multiplication and distribution of bacterial life. It is also probable that the constitutional depression produced by a persistently high atmospheric temperature interferes to some extent with normal digestion. The mucous membrane is thereby weakened, causing it readily to become inflamed by undigested food, which acts as a foreign body, and a way is thus prepared for local intestinal infection.

The characteristic features of this disease consist in sudden onset, attended by frequent vomiting, frequent motions of loose, watery consistency, which, in the early stage, contain neither mucus nor blood, are green in colour and not offensive. A condition of collapse ensues, so that the extremities are cold and cyanosed, the eyes sunken, the skin shrivelled, and the abdomen generally lax and retracted ; the pulse is feeble and small, and the temperature is raised.

Among 109 cases admitted to the Park Hospital in the autumn of 1911, 46 presented the features above described. Of these 27 recovered and 19 died. Of the 19, two groups stand out sharply. There are those which die in a few hours or days after the onset of symptoms. Four died within twelve hours of admission. Five lived from four to ten days and died from hyperæmia, convulsions, or cardiac failure. In none of these was any lesion found that would directly account for death. The second group are those which recover from the acute symptoms but subsequently waste away in spite of all treatment and care ; it is a class which is but little understood. No fewer than seven ran this protracted course and died without macroscopic evidence of organic disease ; most of these lived four or five weeks after the acute attack, and one for nine weeks. It may be that the digestive organs in these cases are so impaired from the severity of the attack that little or no food can be assimilated.

It is usual to give a very grave prognosis in gastro-enteritis. Yet it is probable that, in the great majority of instances, death does not result from an acute attack in a previously healthy child. As a rule the infant who dies of gastro-enteric disease has suffered from malnutrition for a longer or shorter period before its fatal illness began. Careful investigation will almost invariably show that the acute process has developed upon a soil which has been long prepared for it.

This malnutrition may be due to any influence that diminishes vitality, whether acting after birth or during intrauterine life ; it may be, and very often is, due to impure air, inadequate clothing, or neglect of other hygienic precautions ; it may occur in breast-fed infants from too frequent or over-feeding, or from abnormal breast milk ; but it is more commonly due to the chronic digestive troubles of bottle-fed babies, and these in turn are caused by food, improper in amount or time of administration.

The treatment of gastro-enteritis may be prophylactic or curative, the former being infinitely the more important. It cannot be too strongly insisted that the breast-feeding of infants, in conjunction with ordinary hygienic precautions, is far the most effective means of preventing the onset of the disease. Yet we have to recognise that this is impossible in many cases, through economic or other causes, and that recourse must be had to artificial feeding in some form. The cheapness and availability of cows' milk combine to make it the substitute in common use. Unfortunately, it is in this source that most epidemics of gastro-enteritis have their origin. As withdrawn from the udder, milk is sterile, and opinions differ as to the usual place where contamination occurs. Delépine concluded from experimental work that it occurred most frequently at the farm or during transit. Newsholme, however, showed that at Brighton 53 per cent. of fatal cases must have been infected at home, and believed that the milk had been exposed to infected dust in the house. It is now recognised that flies constitute a further important agency in the carriage of infection.

Many public bodies endeavour to ensure the purity of the milk supply during summer by affording facilities for its sterilisation. Such measures, where carefully carried out, have effected a considerable reduction in the infant mortality, for they inevitably destroy any pathogenic organisms present in milk, though not necessarily destroying any toxins which these may have elaborated.

The great difficulty in practice has been that of educating the laity as to the importance of giving proper care to the preparation and preservation of their infants' food. It is very difficult to get the average mother of the poorer classes to realise the dangers arising from lack of scrupulous cleanliness of bottles, spoons, soothers, etc. ; the importance of prompt attention to all mild derangements in summer ; and that a deduction in the amount of food and an increase in the amount of water is a good summer rule. The ideal method, in the case of children who are bottle-fed, is that the milk should be obtained fresh at least twice a day, sterilised at once, covered in order to prevent access of dust and flies, and kept in a cool, light place.

At the Park Hospital during the summer and autumn of 1911 both sterilised milk and desiccated milk were extensively used, the latter being reconstituted by the addition of water. Dried milk possesses obvious advantages over raw milk, in that it is not liable to contamination by micro-organisms, whether dust-borne or by flies ; it keeps perfectly during the warmest weather, and can be freshly prepared for each meal. In a series of 137 cases, 74 were fed on sterilised milk for several weeks before their illness, the remaining 63 on dried milk. Of the former, 8.1 per cent. died ; of the latter, 4.7 per cent. The readiness with which dried milk is digested is probably due to the fact that, in the process of drying, the casein undergoes some physical alteration which prevents it subsequently forming a dense clot. Such results as we have thus far obtained seem to indicate that the use of sterilised milk over long periods tends to lower the resistance to disease. The mineral matter in dried milk consists largely of calcium in a readily assimilable form, and this, by maintaining the normal specific gravity of the blood, may be of considerable value in preventing gastro-enteritis—for investigation has shown that the onset of this disease invariably coincides with a diminution in the blood's specific gravity. Moreover, the acidity of dried milk is only plus 4.5 (Eyre's scale) as compared with plus 22.6, which is that of an average sample of milk in summer. This may also be a factor of some significance. It is usually objected that the use of dried milks is associated with tendencies to rickets and scurvy, but we have not experienced any difficulties of this kind, even in cases where feeding has been continued over long periods. The particular form we have used is simply a dried essence of whole milk, with additional cream and milk sugar, a close approximation to dried human milk being thus attained. It has been employed in the control of epidemics during the past few years by the municipal authorities of Finsbury, Leicester and Sheffield. (3)

Obviously, if any substitute for ordinary milk in summer is to be extensively used, the economic factor becomes of paramount importance. At the Park Hospital and other institutions, dried milk was found to be relatively cheaper than raw milk. If there were an organisation whereby municipal authorities would come into direct touch with the consumer, the general public could doubtless obtain similar advantages.

In the curative treatment of gastro-enteritis, the rectification of bad hygienic surroundings and the dietetic treatment are of fundamental importance. Milk in any form must be at once stopped for 24 hours or longer, according to the severity of the case. Thirst should be relieved by bland fluids, frequently given, but in small quantities, and always cold. For this purpose barley-water, rice-water or whey are satisfactory. The use of albumen-water results in intestinal putrefaction, unless given in too small quantity to be of nutritive value; it is too good a culture medium for bacteria. It is advisable, if there is persistent vomiting, to administer copious draughts of cold water, previously boiled. This is readily taken, and may be almost immediately vomited; this cleanses the stomach, and it is a fair substitute for washing it out. It also helps to wash out the small intestine, and this should be further assisted by the administration of ol. ricini (ʒi–ʒii); when this cannot be tolerated, calomel is the best substitute, and may also be given in minute doses as an intestinal antiseptic every three hours during the first 36 hours. In my experience the various bismuth and tannin preparations are entirely without value. Should heart failure supervene, strophanthus, caffeine and camphor have their uses.

In conditions of extreme collapse, half a minim of Liq. Strych. B.P. may be given every four hours. The subcutaneous transfusion of 4 ozs. of normal saline solution at 100 deg. F. is a valuable adjunct in many cases, in conjunction with rectal irrigation, once in 24 hours, with 6 to 8 ozs. of hot water, this being continued until the returning fluid is clear of mucus. In all severe cases, brandy is preferable to any other stimulant, 10 to 20 minims being given every two hours in the barley-water.

The best guide for resuming milk diet is the general condition of the patient rather than the temperature or any one symptom. At first, any mixture employed should be poor in fat and carbohydrates, given in the smallest amounts and with long feeding intervals. Digestion being greatly impaired, any increase in concentration of food should be gradual and the result carefully watched.

It is clear that the problem of infant mortality must be solved in the tenements. By reason of large numbers and gross ignorance the vast majority of deaths occur here. Many difficulties will have to be met before the hope can be entertained that gastro-enteritis will be controlled by sanitary authorities. The questions of poverty, bad housing and alcoholism cannot be materially influenced within a decade. On the other hand, it is a significant fact that the infant mortality is highest in those countries in which illiteracy among the women is greatest. The colossal ignorance of the poor in questions of infant feeding and hygiene can be immediately dealt with. In no department of medicine are proper measures more likely to be followed by rapid and striking results than in the reduction of the infant mortality.

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(1) *Bost. Med. and Surg. Journ.*, 1911, i. 294.
(2) *Jahrbuch f. Kinderheilkunde*, June, 1900.
(3) *Brit. Med. Journ.*, Sept. 28, 1908.

Sir Carl Meyer will preside at the annual festival dinner of the City of London Hospital for Diseases of the Chest, Victoria Park, which will be held in the Hall of the Worshipful Company of Fishmongers, by kind permission of their Court, on Thursday November 21st.

THE INFLUENCE OF SEGREGATION UPON PROSTITUTION AND UPON THE PUBLIC.

By HOWARD A. KELLY, M.D.,

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So many are the sources and so numerous are the ramifications of what is called by dishonourable pre-eminence "the social evil" that we must of necessity confine our examination to a single phase of it, namely, segregation, or the setting apart of a certain section of the city to an immoral business, under governmental sanction and control, with a view to checking its growth and rendering it safer for its patrons.

There would seem to be but three alternatives worthy of consideration in dealing with prostitution, namely:

1. Segregation, with or without legalisation.
2. Indifference, *i.e.*, letting the matter thrive without interference.
3. An active, unremitting crusade, with extermination as its final objective.

The second alternative—indifference—resulting in late years in the development of prostitution into a commercialised business involving seductions and graft on a vast scale, is the only one which has really been tried in this country.

Indifference has been the attitude of the public; while the police and our judges have often insisted upon some degree of segregation. Segregation has, moreover, been a measure adopted and maintained by those most interested, the brothel-keepers, for mutual support and to avoid too great publicity.

The meetings of three international Congresses at Brussels and Madrid, other public meetings like this held all over the country, the formation of numerous societies and commissions of investigation in our large cities, as well as the many successful prosecutions of panderers and bawdy-house keepers, these things all testify to a public conscience awakened to the realisation that the policy of indifference or of quasi-regulation is ruinous to the body politic, and brands with infamy every community in which it is permitted to continue when once the facts are known.

Our entire country has agreed to dismiss this alternative as one only tolerable in a state of ignorance of the facts. We will, therefore, confine our attention to (1) Segregation, embracing, as it always does, certain forms of legalisation, and to (2) Extermination.

Segregation appeals at once and irresistibly to the average man as the most acceptable plan, when he for the first time approaches the subject, because:

1. It recognises the fact that the evil is as old as the race, and appears, therefore, ineradicable. Segregation devotes every energy to curbing it.
2. It is a method or policy which has been tried extensively in Europe for over a century.
3. (A most potent reason.) It rids the individual of the necessity of bothering further with the matter, by relegating the control of prostitution to a set of qualified officers of the law. This is the attitude so familiar to us all some twenty or thirty years ago. Since that time, in every land, vice has increased enormously; it has taken on new forms in America, copying the worst European prototypes, and its baleful influences have been felt in thousands of new channels.

Any and every definite policy of segregation involves the recognition of prostitution by the law, the investing of certain officials with due authority to control, and the giving to prostitution the status of a legitimate trade. It at once necessitates the employment of a special body of police exercising surveillance in order to keep prostitution and the prostitute within assigned bounds and in order to repress its ever-recurring criminal manifestations. Segregation calls also for the official enlistment and the recognition of a need of the services of certain members of the medical profession who regularly and at intervals of a few days examine the prostitutes in order to certify that they are free from disease and therefore safe, or to set apart the diseased ones for treatment. Furthermore, it must at least contemplate an acquiescence in the necessary efforts to procure the requisite fresh supply of young women, often virgins, many thousands each year, to fill the places of those dying of disease, by suicide, or thrust out of the door when worn out to enter almshouses or asylums. It also necessitates the provision of adequate hospital accommodation for the multitude of women and men afflicted with those loathsome and highly contagious diseases, syphilis and gonorrhoea.

If I knew of a single argument in favour of segregation, or if I had met with any good results in the shape of an improvement through its means, of the morals of a community in any quarter of the world, or any lessening of disease by its beneficent ministrations, I would place them before you now. I know of none. I do not believe there are any. I have, therefore, come here to-night (*a*) to ask each one of you, individually and personally, to stand in line with the most modern advancement in social progress—namely, that of opposing segregation and regulation of vice, because it has been thoroughly tried and demonstrated to be a failure in all the foreign countries in which it has been inaugurated, and in which the system of police control has been far more favourable because far more perfect and less corruptible than in any part of the United States.

I discover that the failure of segregation is admitted by every earnest and pure-minded man and every earnest woman who has made an unbiassed investigation into the matter. Even those whose duty it has been to see it carried out declare the measure a failure. The most earnest advocates of extermination to-day are those who began their inquiries under the strong conviction that segregation was both necessary and feasible.

Let us now begin our inquiry by considering the actual experiences of other countries. Following these conclusive data, I will give you certain authoritative opinions based thereupon. These two lines of argument ought to be convincing and to determine our own judgment and our practice. At least they should prevent us from attempting foolish, already worn-out experiments in such a vital matter, and enable us to avoid that common American pitfall, viz., the taking up of ancient, worked-out problems with which we proceed to deal as though they had never been propounded before, and as though it devolved upon us to illuminate the world by their solution.

I quote the following from Prof. Seligman, who tells us that "the system of regulation in Brussels was long considered a model. At the end of the seventies a series of most outrageous scandals occurred, showing an astounding condition of corruption among police officials and direct complicity between the chief-of-police and the houses of ill-fame. These revelations, which confounded all Europe, somewhat abated the zeal of the enthusiasts for the Brussels system."

At the second international conference, held in Brussels in 1902, the abolition movement was headed by four leading Paris doctors—Dr. Gailleton, the head of the French Delegation; Dr. Gaucher, the successor of Prof. Fournier; Dr. Queyrat, the head of one of the leading hospitals, and Dr. Landouzy, who represented the French Ministry of Public Instruction. These physicians condemned the existing system as utterly worthless.

Although the Abolitionists in France were originally in the minority, the force of the arguments and facts presented by them was such that at the end of its deliberations the Commission voted by a considerable majority that the entire system of regulation, as practised in France, was so defective and, on the whole, immoral that it ought to be entirely abandoned. Thus, after an experience of more than a century, the French experts came to the conclusion that the whole "Régime des Mœurs" had outlived its usefulness.

Professor Seligman also shows that in Germany excellent constructive work has been accomplished by the Society for the Prevention of Venereal Diseases, founded in 1902. Far better facilities have been provided for venereal patients, chairs for the teaching of venerology have been established in the universities, courses have been provided in sex pedagogy in the high schools, and millions of leaflets have been issued to enlighten the public as to its danger. The result has been a complete change of front in the attitude of the periodicals and the daily press on the subject. Berlin no longer has any open public houses of prostitution, and has no segregated districts. The prostitutes are, however, still registered and compelled to submit to medical control.

In Sweden the change of opinion has been scarcely less marked than in France. In 1903, after the second Brussels Conference, Mr. Otto Westerburg and Mr. Hugo Tamm, who had been converted to Abolitionism, persuaded the Swedish Parliament to ask the King to appoint a Royal Commission to study the subject. The Commission was formed with nine members, seven of whom were Regulationists. During the course of the discussion, however, all seven were converted to the other side. After several years' work, the Commission made its report in 1901. The members unanimously agreed in recommending the abandonment of the existing system of regulation, while their constructive recommendations included the compulsory notification of venereal disease, and the subjection of confirmed prostitutes to the provisions of the law governing vagrants.

In Norway and Sweden the *police des mœurs* has been abolished, and while some of its power has been transferred to the ordinary police, the provision with reference to compulsory treatment has become a dead letter.

"In Italy a complete system of gratuitous dispensary treatment of all venereal patients was developed in the 'eighties and the 'nineties, and paved the way for the abolition of the entire system of police control over women. In 1904 the system was rescinded by administrative ordinance on the ground that 'every sort of direct compulsion for the ascertainment and cure of venereal disease is injurious to public prophylaxis, as it increases the number of persons compelled to conceal their malady and avoid the means of cure.' But some features of the old system are preserved in the Regolamento sul Meretricio in houses of ill-fame, in that the Government still recognises and tolerates these houses. The inmates, however, are entirely free to leave at any time."

Even in Japan, where the celebrated segregated quarter, Yoshiwara, was destroyed by fire a year ago, a movement has been inaugurated with the co-operation of no less important a personage than ex-Premier Count Okuma, to abolish the system of government regulation. A new society, the Kakusei Kai, is now vigorously at work, and is publishing its own journal.

Thus, slowly, but surely, breaches are being made in the solid ranks of those who, until a generation ago, had no doubt as to the effectiveness and beneficence of the regulation of vice. The practice has been given up in Denmark, except in three provinces. Even Madrid has now the same system as Berlin, and no longer tolerates or recognises an area of segregation.

At this juncture, let me cite the testimony of several authorities whose names will count for much in a decision. First of all I would consult one of my *confrères*, Chanfleury van Ijsselstein, who wrote a remarkable pamphlet, as far back as 1889, giving with absolute frankness his experience in investigating the methods of control in use in Paris and Brussels, and his own personal later experience at The Hague, where he was made responsible for the health of the prostitutes. That he was subject to no bias is evident from his declaration that the effort to secure healthy coitus for the public is akin to the question of the purity of the food and drink supply. I quote, *passim*, from his instructive pamphlet:—

"Some years ago I went to Paris and to Brussels for the special purpose of studying this question as thoroughly as possible. These two cities had, at that time, the reputation of carrying out the method of official control and treatment of prostitutes in the best possible manner.

"I had opportunities to observe the examination of prostitutes at the Bureau des Mœurs in Paris and of

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(*a*) Feb. 28th, 1912, Pennsylvania Society for the Prevention of Social Disease, Philadelphia.

following attentively the methods employed by the medical men. I was also present during the examinations at the public brothels, and I feel it right to say that a large number of women were examined in a manner so superficial that I was astonished. On returning from my tour of inspection, I made no delay in seeking an opportunity of applying the knowledge I had just acquired, and I was placed in charge of the examinations at The Hague. I applied myself courageously to my task, with all the ardour of a young practitioner who sees a new career opening before him, and whose zeal is stimulated by the feeling that an important branch of public hygiene is committed to his care. There was at that time no opposition to the application of energetic measures.

"And what were the results of these examinations, conducted, as they were, with the utmost severity? They were so far from satisfactory that at the end of several years I became convinced that I ought to ask to be relieved from an undertaking which was apparently entirely wanting in the usefulness to the public health expected from it in the beginning. How are these negative results to be explained? By the fact that a medical examination, no matter how carefully conducted, affords no guarantee whatever against contagion. In the course of my unexpected visits to brothels I was obliged to send some two-thirds of the women examined to hospitals.

"Moreover, the severe measures which had been taken aroused the whole body of prostitutes to resistance, and I could not make my evening visit to the hospital without a police escort, so much reason was there to fear that the numerous anonymous threats addressed to me would be put into execution. It should once more be noted that at this period the contagiousness of syphilis through the blood and secretions of a patient in the condylomatous stage was not yet demonstrated. A knowledge of this fact would have led me to withdraw a much larger number of suspected persons.

"From all that has been said I feel myself justified in drawing the conclusion that such a thing as a safe public prostitute does not exist.

"A great many men who are kept away from brothels by fear of contagion resort freely to them if this dread is removed, believing that they can profit by such a favourable opportunity with security. I saw clearly, when at The Hague, that the attendance at the public houses increased as soon as the report spread that I was in charge of the examinations. Therefore, the numbers only increased, instead of diminishing, in consequence of the elimination of so many unsafe subjects. And yet, in spite of the minuteness with which the examinations were made, a certain number of persons who had remained abstinent up to that time contracted venereal disease.

"Clandestine prostitution has always been the great obstacle to the adjustment of regulation. With public prostitution, on the contrary, things are quite different. Women who practise it are at the disposition of every comer at any time; their houses are veritable dens of debauchery, where liquor is employed, as a matter of course, to destroy men's will power and drive them to commit irreparable sins. Lastly, does not observation teach us that venereal patients who present themselves at clinics or at public hospitals have most frequently contracted disease through frequenting public houses of prostitution? What I have already said seems to me sufficient to prove that the suppression of public prostitution would, on the whole, be a benefit to public health. If we wish to contend with this terrible class of diseases, it is above all necessary that venereal patients should have medical attendance at their disposal."

During the nineties a distinguished Belgian specialist, Dr. Dubois Havenith, organised a conference, which was held in Brussels, under the presidency of the Belgian Minister of Health and the Burgomaster of Brussels, and 295 of those present were distinguished physicians. It was most significant that, after the conference, some of the most prominent Continental as well as English physicians utterly denied the value of regulation. Three out of the first four speakers, Dr. Blaschko of Berlin, Augagneur of Lyons, and Barthelemy, one of the medical chiefs of the St Lazare, condemned the existing system. (Seligman.)

Fournier, the greatest syphilographer living, after years of practical experience in charge of the whole system in Paris, acknowledge the utter failure of regulation: "In spite of all efforts at regulation, venereal diseases abound and superabound." Our own Prince A. Morrow is utterly opposed to any form of regulation. ("Social Hygiene and Marriage," p. 342.) Neisser, our greatest living authority on gonorrhœa, and the discoverer of the germ which caused it, is strong in his opposition to segregation and regulation. He says: "One thing is certain, everyone agrees—the partisans of regulation not excepted—that the methods actually in use for diminishing the evils of prostitution cannot be considered effective. The organisation and administration of the surveillance, medical and police, are so defective that, in our opinion, but little is to be expected from it." ("Bull. de la Soc. Internat. de Prophylaxie Sanitaire et Morale," I., i.), and "The system of supervision and regulation of vice which exists is more designed to force into the depths the girls who are on the downward path, and to retain in the profession of prostitution those who are already under police control, than to lighten their return to the right." (Neisser, Conference Internat. Brussels, 1899.) The effect of regulation simply means that the woman is more likely longer to remain a prostitute. (Yves Guyot, "La Prostitution.")

"Inscription upon the register of the bureau of morals is the final stage of vice, the final term of degradation. It is the official formality, which, like the *licentia stupri* of the Romans, regulates and legitimates the sad trade of prostitution. It is, in a word, that sinister act which severs a woman from society and makes her a chattel of the Administration." (Dr. Hippolyte Mireure, "La Prostitution à Marseilles.") "The more regulated prostitution there is in a country, the more prostitution of every kind will develop. And where there is regulated prostitution there is late marriage and the growth of population descends to a minimum." (Armand Déprès, "La Prostitution en France.")

Clifford G. Roe (a member of the National Vigilance Committee, and President of the American Alliance for the Protection of the White Slave Traffic), former Assistant States Attorney of Chicago, for a long time engaged in investigating these conditions, and the writer of a remarkable work, "Panderers and their White Slaves," declares himself, as the result of his investigations, as utterly opposed to all forms of segregation and in favour of extermination.

Dr. O. E. Janney, who has most carefully studied the subject and is widely known as an authority, has written a book, "The White Slave Traffic in America" (published by the National Vigilance Committee), in which he devotes his whole energy to opposing both the system of indifference to which we have grown accustomed and the system of regulation which has so conspicuously failed abroad.

Professor Seligman says, "There is only one point I should like to emphasise, as leading up to the position which I take—and, I may say in this respect, it is the position which, so far as I know, is taken to-day by all the surviving members of the Committee of Fifteen. It is a remarkable fact, that when we came together to investigate the problem, knowing very little about it—just about as much or as little as does the ordinary man or woman—the great majority of us were in favour of regulation on the principle that it could do no harm and might do some good. It was only after a prolonged study of the situation as regards both the facts and the principles involved—that the committee came unanimously to the conclusion that regulation or reglementation was inadvisable and inadmissible."

Jane Addams, in a series of remarkable articles, (*a*) portrays the depths of vice and crime to which we, the American people, have descended under the existing conditions of tacit consent and indifference.

The Vice Commission of Chicago issued a report in 1911, covering 368 pages, which seems destined to

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(*a*) "A New Conscience and an Ancient Evil." *McClure's Magazine*. 1911-1912.

occupy a most important place in the history of this subject.

The conclusions of this commission are unassailable because of the independent and representative character of the men and women who composed it, as well as on account of the thoroughness with which the work was done, and the frank fearlessness with which their conclusions are presented. The report breathes throughout an atmosphere of moral vigour, too often lacking in the timorous lukewarm statements to which we have grown accustomed from committees of good citizens.

At the very outset (p. 17), in its "Introduction and Summary," this report declares in bold capitals:—

"Persistent Repression of Prostitution the Immediate Method: Absolute Annihilation the Ultimate Ideal," (*b*) and "That there must be constant repression of this curse on human society is the conclusion of the commission after months of exhaustive study and investigation—a study which has included the academic with the practical, moral ideals with human weaknesses, honesty of administration with corruption, the possible with the impossible. It has sought to meet all questions fairly; it has made every effort to work with intelligence; it has kept constantly in mind that to offer a contribution of any value such an offering must be, first, moral; second, reasonable and practical; third, possible under the constitutional powers of our courts; fourth, that which will square with the public conscience of the American people."

In a report by the Vice Commission of Fifteen of Minneapolis, issued to Mayor Hayne, last year (1911), the conclusion is stated in these words: "And now, your Honour, the large and exacting task of your commission is at an end. That the work is imperfect, no one can more fully realise than the members of this body themselves; we believe, however, that the main position, Enforcement of Law Against Public Prostitution, is unassailable. We shall be glad of all criticism that is not merely captious or that does not bear the suspicion of a financial interest in the policy of segregation."

Let me then state the case against segregation. Segregation does not, never has and never can thoroughly segregate. The little handful of women under inspection in a given community is but an index of the army of clandestine prostitutes. The futility of all efforts to segregate effectually is shown by the following official figures for three large European cities, where there is a registration list averaging about 10 per cent. of the whole number:

Paris—Police estimate, 45,000; registered, 6,000.
Vienna—Police estimate, 30,000; registered, 3,063.
Berlin—Police estimate, 30,000; registered, 2,016,

Segregation does not protect the public, both because of the inefficiency of the medical examinations, which under any and every political system have at once become farcical and subject to corruption and graft, and because of the false confidence of safety instilled into the boys and men.

Dr. Frederic Griffith, writing of his observations in Paris, states that he has known 400 women examined in an hour and a half! ("New York Medical Record," April, 1904.)

In Berlin the Wassermann reaction has shown that after the lapse of one year almost 100 per cent. of the prostitutes have syphilis; note also that it is not possible to distinguish sharply between the infective and the non-infective stages of the disease.

Segregation is intolerable because it corrupts the police officials who have any dealings with the houses by putting into their hands unlimited opportunities for blackmail and graft.

Segregation introduces a plague spot of vice where violence, debauchery and wild orgies nightly run their gamut of crime, often even including murder, unchecked.

Under a system of segregation a man hungry with lust is never satisfied, while seduction and the violation of virgins outside the segregated districts is far commoner than under repression. The encouragement of vice which is thus tolerated in one section of a city can never be confined to that section. The man who enters the segregated district for an immoral purpose carries his immorality and his physical disease wherever he goes, so pervasive and so infectious are these deadly moral and physical miasms. Their diffusion is perfectly demonstrated in the universality of the diseases which are the fateful messengers from the prostitute to her sisters outside of the district.

One capital reason why segregation fails is that it is not even meant to segregate, but simply to legalise an enormously profitable business of bawdy house keepers and panderers, who desire for their own profit to fix upon the people a diabolical trade in the souls and bodies of girls. Once established, with the vantage ground of legal protection, they will ply their trade as they have in the past, as they do to-day in Baltimore and other large cities, until from our whole land there goes up the stench of the moral corruption which engulfs all our youth, sparing no age and no condition in the social scale, so rapidly and so absolutely does injured purity avenge itself.

Segregation is inadmissible as a solution of the prostitution question because no legislative body may by any decree, or by however great a majority, give vice a legal status. It is true acts can be passed and force can be exerted to carry them out, but this does not make the enactment legal, and any right-minded judge can upset it as unconstitutional in the very first case coming to trial. We have too long lost sight of the fundamental fact that morality is the very foundation of the constitutions of all our States. In these instruments which constitute the bodies politic of our various States, the declaration is repeatedly made that it is a necessary part of the very life of a government to promote morality.

Florida says: "The liberty of conscience shall not be so constructed as to justify licentiousness, practices subversive of or inconsistent with, the peace or moral safety of the States or society." The Constitution of Arkansas declares: "Religion, morality and knowledge are essential to good government." The Constitution of the State of Maryland: "That no person shall be molested on account of his religious profession unless, under the colour of religion he shall disturb the good order, peace or safety of the State or shall infringe the laws of morality." Massachusetts affirms that: "Wisdom and knowledge, as well as virtue, diffused generally among the body of the people, are necessary for the preservation of their rights and liberties."

I quote also from The Commonwealth *vs.* Douglas, decided in the Court of Appeals: "When we consider that honest morality and religion and education are the main pillars of the State, and for the protection and promotion of which government was instituted among men, the preservation of the trust is essential to the happiness and welfare of the beneficiaries, which the trustees have no power to sell or give away. If it be conceded that the State can give, sell or barter any one of them, it follows that it can thus surrender its control of all, and convert the State into dens of bawdy houses, gambling shops and other places of vice and demoralisation, provided the grantees pay for the privileges." North Carolina, Virginia and West Virginia significantly add (mark well these words, quoted from the North Carolina Constitution), that "A frequent recurrence to fundamental principles is absolutely necessary to preserve the blessings of Liberty."

I wonder what prophet wrote that sentence! We are suffering to-day because we have forgotten some of our fundamental principles, without which no just government can long exist. All the great minds that have dealt with the great underlying principles of jurisprudence unite in agreeing with Bishop, one of our highest authorities, that the State rests upon three supports: "Morality, religion and education are the three main pillars of the State and the substance of all private good. A community from which they are banished represents more than the original chaos. Therefore they should be objects of primary regard by the law."

The rational and simple conclusion of the whole

(*b*) Two years ago there were as many prostitutes in Chicago as in New York.

matter then is this: We resolve that we ought, we can, we will fight this vice to its utter extermination in all our broad land; that instead of yearly sacrificing to impure lives thousands of our young men and women, the hope of our country, we will save them for a high and noble citizenship; that we will oppose segregation and regulation of vice in any and every form in which it may seek to establish itself on a legal or quasi-legal basis; and that we will instruct our own boys and girls, and all the youth of our land, in the simple, physiological facts necessary to guard them from physical and moral harm.

THE SUPPRESSION OF TUBERCULOSIS IN IRELAND.

By SAMUEL AGNEW, M.A., M.D.,

Medical Officer of Health for Lurgan.

THE time has now arrived when it becomes necessary to organise the different forces at our command so as to combat successfully the spread of tuberculosis. The ways and means have been very fully and clearly explained in the Interim Report of the Departmental Committee on Tuberculosis which has been recently published—a copy of which should be placed in the hands of every county councillor, every member of a sanitary authority, and every member of a local insurance committee in Ireland. The Local Government Board of England has already issued two circulars on the subject, accompanied by a memorandum on the administration of sanatorium benefit by the National Insurance Commission (England). The Local Government Board of Ireland does not seem to be anxious to do things in too great a hurry, which is rather to be deprecated, seeing that so many county councils are displaying an anxiety to get things into working order. Under the National Insurance Act, sanatorium benefit should now be available for insured persons, and insurance committees are aware that they are under a statutory obligation to provide proper treatment for all such as are attacked by the disease. This treatment may be given (*a*) in sanatoriums, hospitals, or other institutions, or (*b*) at tuberculosis dispensaries or other non-residential institutions, or in the patients' homes. The committees are not themselves empowered to provide institutions, their duty being to make arrangements with local authorities or suitable persons to the satisfaction of the Local Government Board. Having satisfied themselves that the cases are really tuberculous they are bound to make suitable arrangements with a view to proper treatment being provided in each case in appropriate institutions or in the patients' homes.

In Ireland the provision of sanatoria and the establishment of tuberculosis dispensaries are placed in the hands of the county councils, who are empowered to appoint county committees for the control and management of them; and to encourage these bodies to take up the work in a whole-hearted way, a very large subsidy is given to each county to assist in building suitable institutions, of which it is to be hoped they will avail themselves. The erection of sanatoria will, however, occupy some considerable time, and should not be undertaken without due consideration, and only after having had expert advice. There being no county medical officers of health in Ireland, such advice is not immediately obtainable, but in the establishment of a tuberculosis dispensary, they can place themselves in a position to secure it without any unnecessary delay. In providing such a dispensary the first essential is the appointment of a skilled tuberculosis officer with capacity for organisation, who will be responsible for the general conduct and administration of the dispensary. The Departmental Committee recommend that such an officer should have at least £500 a year with prospects of increase, and I am pleased to observe that in my native County of Down, the County Council are advertising for such an officer, and have fixed the salary at £500 a year, with £150 for expenses. As the Departmental Committee have very carefully pointed out, and have strongly emphasized the point, a tuberculosis dispensary is not a building, but an organism. "The essential element which must always be present is the chief tuberculosis officer appointed by the local authority; standing in such relation to the medical officer of health and the general scheme of public health administration as may be defined by the regulations of the local authority; acting as expert adviser to the local authority and insurance committee in matters of diagnosis and treatment; controlling, supervising, or acting in consultation with, as circumstances may determine, the whole-time subordinate medical officers and private practitioners by whom treatment is given; and himself treating cases for which special skill and experience are required." A large proportion of the cases of pulmonary tuberculosis, and some cases of other forms of tuberculosis can be adequately treated in the patient's own home. Treatment provided by the dispensary will include not only general "sanatorium treatment," whether in a patient's home or in a shelter, but also more special methods of sanatorium treatment, for example, treatment by tuberculin. Under the provisions of the Insurance Act, the treatment of tuberculosis patients who are insured must be entirely separated from the Poor Law, and the establishment of tuberculosis dispensaries by the county councils will enable this to be done. By utilising the services of the medical officers of health, except in the case of county boroughs, where ideal dispensaries can be formed, a complete scheme of organisation can be worked out for each county, in which harmony and efficiency will be the leading characteristics. In the tuberculosis dispensary an item of great importance is the district nurse specially experienced in the treatment of tuberculosis patients. One of these should be placed in the district of each medical officer of health and under his direct supervision. A small cottage, such as a labourer's cottage, should be provided for her at a short distance from the doctor's dwelling, with sufficient ground attached to enable two or more portable shelters to be erected for the accommodation of patients who could not, for want of space or other reasons, be allowed to remain in their own homes; and in the larger centres the situation and surroundings of the nurse's cottage might be such as to afford space for the erection of six or eight shelters. Whilst under the direct supervision of the medical officer of health, the shelters and services of the nurse would be available for all patients, and private practitioners could treat their patients therein without any interference

It is, of course, understood that the services of the chief tuberculosis officer or tuberculosis superintendent would be at the disposal of all the medical practitioners within the area; but as regards matters pertaining more directly to the public health and the prevention of the spread of the disease, he would be in closer touch with medical officers of health. These district shelters would simply be feeders for the sanatorium, which should, of course, be erected, and, I hope, will be erected for each county, either separately or jointly, in which the most up-to-date treatment will be provided. Whilst the tuberculosis superintendent is a full-time officer, debarred from private practice, arrangements will have to be made with the medical officers of health and private practitioners for the treatment of all patients outside the sanatorium who do not undertake to pay for their own medical attendance. As far as those insured are concerned, they will have to be given free choice of doctor, and a panel formed of those doctors who are willing to act on the terms offered. This arrangement might be extended to all patients who are not in a financial position to pay for medical attendance. In the meantime it must be recollected that ordinary dispensary patients who are the victims of tuberculosis must be catered for by the insurance committees, if they are insured, and are not, therefore, in a position to demand poor-law relief. In conclusion, I would like to draw attention to something which must be done to facilitate the conduct of the campaign in Ireland. The restrictions which have been placed upon notifiable consumption by the Local Government Board under the powers vested in them by the Tuberculosis Act should be removed, or else tuberculosis should be scheduled amongst the list of infectious diseases after compliance with the terms of Section 7 of the Infectious Disease (Notification) Act, and this Act extended to all Ireland, as it has been extended to Great Britain. The medical officer of health must also be placed in his proper position with regard to the administration of the Dairies, Cowsheds and Milkshops Order, with adequate remuneration for his services. I would further suggest to the local medical committees that they should endeavour to frustrate any attempt to divert the treatment of tuberculosis patients from the care of the general body of the profession, so as to place them under the immediate control of a county specialist, assisted only by a staff of nurses. The domiciliary treatment of tuberculosis patients is as important as ever, and cannot be relegated to a peripatetic expert.

THE FORMATION OF A STATE MEDICAL SERVICE. (*a*)

By ROBERT R. RENTOUL, M.D., &c.,

Liverpool.

In 1886 I obtained a translation of the German laws relating to National Insurance. I came to the conclusion that England must eventually adopt a similar scheme. Since then much "water" has run under the bridge, and now—after twenty-five years of lost time—we attempt to evolve a Service. Personally I feel it would give better national results if the Government made the employment of all doctors a branch of the Civil Service. Nationalisation of medicine is not so far off as some think. The State, or Municipalities, now appoint and pay doctors to look after the men in the Army, Navy, and Indian Army. The Local Government Board appoints Medical officers of health, Poor-law medical officers, and public vaccinators, the Prison Commissioners prison surgeons, and the Lunacy Commissioners see to the appointing—through the County Councils—of asylum doctors. The Board of Trade insists that certain ships shall carry surgeons for the treatment of crew and emigrants. The Colonial Office appoints Colonial surgeons, the Home Office factory surgeons, the Post Office surgeons for their officials; while the Municipalities appoint doctors to fever hospitals and to inspect school children.

It is further suggested that they shall appoint doctors to treat sick school children; and now the Government has agreed to provide some 20,000,000 with State appointed and paid doctors. Some years ago I collected statistics to show that in 1901 about 7,565,385 persons in the United Kingdom obtained free medical treatment; not including some 6,000,000 quasi-charitable club members and 541,559 free vaccinators. If 14,000,000 more be added, you can see—or should see—that the proposal to put all Medical practice under State and Municipal control is not a mere dream; and, if we had a system of examination, pay, promotion, and pension, such as exists in the Army and Navy, then the condition of doctors would be greatly improved. I do not suggest that there would not be a fair number of non-State practitioners also.

As regards the chief points bearing upon a Public Medical Service, I suggest:—

First.—That the Insurance Committees receive from the Insurance Commissioners a sum of money equal to about 6s. per insured person per annum, this to be handed quarterly to the doctor of the insured person. Perhaps this 6s. might be increased to 7s. for each Post Office contributor, old age pensioner, and unemployed, as these will require more treatment.

Second.—That the Insurance Commissioners give 2s. 6d. per annum per member to the doctor or chemist who agrees to supply the insured person with medicines. This 2s. 6d. is rather small, if we wish to give reliable medicines to the sick public. You may have noticed that the average German allowance is 3s. 8½d. to the chemist. This 6s., plus 2s. 6d., would be the minimum sum asked for by the British Medical Association. Personally, I think 8s. 6d. is too small, even when extra fees are given for night, Sunday, and holiday work, and for operations. The German doctors at Leipzig have been granted 15s. per member per annum. I would here emphasise my regret that the Council of the British Medical Association did not send Commissioners abroad to study and report fully upon the Insurance Schemes of France, Germany, Austria and Denmark. The chemists were sufficiently practical to send their representative.

Third.—In order to meet Mr. Lloyd George's objection that he cannot or will not grant 11s. per member per annum, I would suggest that each insured person pay a yearly sum of 5s. (or about one penny weekly) to the doctor who treats him or her. In other words—that they pay the amount the better-class friendly societies now pay their doctors. These three sums of 6s., 2s. 6d., and 5s. would, with 14,000,000 insured persons, give doctors an annual income of £9,450,000, or £472 gross each—exclusive of confinements, vaccinations, notifications, operations, sanatoria, &c., these probably totalling from £50 to £100 each doctor yearly.

It is useless to contend that those making under £160 a year cannot pay this sum of about one penny per week. Sir R. Giffen, in 1886, estimated that the wages of the working classes had increased by 50 to 100 per cent. during the last fifty years, and that their total yearly income was £622,000,000. We all know that since 1886 their wages have, fortunately, increased, and will

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(*a*) Abstract of a paper read before the Medical Sociological Section of the British Medical Association, July 24th, 1912.

go on increasing. At the same time the prices of their foods have decreased by 15 to 20 per cent., rents having increased. There are other ways by which this 5s. a year could be easily provided. Thus it has been estimated that in England each year £23,000,000 is spent upon tobacco, £44,000,000 on sport, and £175,000,000 on the various kinds of concubinage. Take, again, the heavy expenditure upon funerals. In 1910, in England and Wales, 483,321 deaths were registered. It would be fair to estimate that these cost, in ground, mourning, and funeral, on an average £24,166,050. Half of this sum might be saved; and more would be saved if each municipality carried out funerals and burials. Why can't we spend £12,000,000 of this *on the living*, and not on dead bodies, and so establish a splendid system of supplying those under £160 a year with efficient medical, surgical, obstetric, and dental treatment, and medicines? It is idle for a Chancellor to tell us that he cannot raise sufficient money for this. Even if he taxed bachelors and sterile marriages, he could raise over £15,000,000 a year on a graduated taxation on their incomes. Take, again, the unnecessary expenditure upon alcohol—£162,797,229 during 1911; £5,192,571 more than in 1910. This amounts to £3 11s. 10½d. per head of the population, infant, adult, male and female—or £17 19s. 3½d. per family. What is the use of a Chancellor telling us that he cannot find the money. It is mere insult, mere bluff. If he wanted it for any other class of the community, he would readily find it! But the Chancellor has been taught by doctors, unfortunately, that doctors will not object to a little more medical charity from doctors. We, on the other hand, now maintain that *the utmost limit* of medical charity has been reached—nay, over-reached—and that a sponging public must cease sponging upon doctors. I have estimated that we doctors give as charity a sum equal to £8,678,000 yearly to the public in the form of medical charity; £4,000,000 of this to voluntary hospitals; £1,500,000 in private practice; £3,000,000 to clubs and tontines; £64,700 in free death certificates; and £114,250 in notifying births and not including bad debts. It is painful to read in Sir W. Plender's report that 171 doctors had to pay £1,458 to collectors in collecting part of the £113,980 income. Yet Mr. Lloyd George has the brazen effrontery to suggest that our present incomes should be further reduced yearly by £2,800,000. How do I prove this? Well, if we estimate that at present the average gross income of a doctor is £350 a year, this, with 20,000 doctors, amounts to £7,000,000; with 14,000,000 insured persons at 6s. this amounts to £4,200,000. He actually alleges we shall get it back out of the "maternity benefit" of 30s. During 1910, in England and Wales, 897,100 live births were registered, and this at 30s. each would give £1,345,000 yearly. But he knows that more than half these confinements are conducted only by midwives, and so this will be an additional loss of about £672,000 yearly to doctors. Would he agree to repeal the disease and death-dealing Midwives Act?

Fourth.—I propose that each person making under £160 a year subscribes to a Mutual Health Fund, out of which fees for night-work, Sunday and Bank Holiday work, operations, loans to the insured in arrears of payment, tickets to convalescent homes, cost of rules, members' books, and salary of secretary should be met.

Fifth.—That each medical practitioner shall be appointed a public vaccinator and be paid the usual Government scale of fees—at present Boards of Guardians have now such power.

I claim that if we had such a Public Medical Service we would—(1) Relieve the voluntary hospitals of the well-to-do classes who now sponge upon these charities under the plausible untruth that they obtain better treatment there than elsewhere. (2) Supply all those making under £160 a year with efficient medical, surgical, obstetric and dental treatment and medicines; (3) Diminish the sick rate, loss of wages rate, permanently maimed, and the death rate. (4) Lessen the number of quacks, herbalists, bonesetters, midwives, prescribing chemists, clubs, tontines, sixpenny and shilling doctors, and quack medicine vendors. (5) Save doctors immense time in bookkeeping, in sending out accounts, bad debts, collectors, and County Court claims.

Such a service as this would give each of the 20,000 doctors about £522 yearly, in addition to their public and other appointments. And if we can put a stop to the gross abuse of voluntary hospitals, this would add at least £100 a year to each doctor's income. Let us recollect this, that unless we have the active co-operation of the doctors connected with voluntary hospitals a Public Medical Service will be a ghastly fiasco.

I am told by trades unionists that they have no objection to our receiving 15s. per annum per member. I look on the speeches of some friendly society men as mere put-up political clap-trap.

This is the broad basis of my proposal. There will be a lower income limit for country areas. We cannot give efficient treatment if we do not obtain a Government grant and help from insured persons. I think we should adopt a £160 income limit with a sliding scale of incomes at, say, £60, £80, £100, and £160, the yearly contribution by the insured person to vary with income. Also that if, in the future, a Public Medical Service be a financial success, we might adopt provisions for persons making up to £250 a year upon a sliding scale of fees. We must watch that our maternity fee shall not be cut by midwives either employed by hospitals, maternity clubs, or acting for themselves. I am told they look upon the Insurance Act as a State endowment for Midwives.

I think all doctors acting under the State Insurance should be given all the benefits free, the payments being made by the State.

CLINICAL RECORDS.

A CASE OF MUMPS, FOLLOWED BY ORCHITIS OCCURRING IN A RETAINED TESTICLE.

UNDER THE CARE OF S. J. ROSS, M.D., CH.B.

Surgeon to Out-patients, Bedford County Hospital.

THE patient, a boy, æt. 14, contracted mumps. The attack was not a severe one, but on the eleventh day of the disease his temperature rose to 102°, and he complained of great pain in his right inguinal region. Upon examination, I discovered that the right half of the scrotum was empty; the right inguinal canal was also empty, but upon invaginating the scrotum and examining the canal, I caused excruciating pain which was referred to in the neighbourhood of Scarpa's triangle. Clearly the case was one of orchitis occurring in an abnormally placed testicle. At the end of a fortnight the pain continued, with periods of marked exacerbation, so that I decided to remove the offending organ.

At the operation I found it placed just at the internal abdominal ring. I removed it and examined it microscopically. It was a very poorly-developed organ, and showed the typical signs of inflammation.

I record this case, which I am sure is by no means unique, for the following reasons :—

1. Orchitis accompanying mumps is a by no means rare complication, but is always of interest, as it is, as yet, an unexplained phenomenon. To talk of metastasis is to cover our ignorance by means of a term. Nevertheless, the condition clearly favours the organismal theory of the cause of the disease.

2. The "referred pain" is of interest.

3. There could be no doubt as to the correct treatment to adopt.

Misplaced testicles are nearly always undeveloped, atrophic, useless organs, as was the case in the organ we removed. They are liable to injury and inflammatory attacks.

Inflammation is the precancerous condition, and we have instances of sarcoma developing in a retained testicle. In this case the testicle was an ill-developed organ in an inflammatory condition, valueless functionally, a source of pain and even danger to the patient, and therefore he was better without it.

4. It is well to remember also that orchitis, following mumps, not infrequently ends in atrophy of the organ.

Of course, even an atrophied organ, if in its correct position, is better than an absent one, at any rate, in the eyes of the patient.

OPERATING THEATRES.

KING'S COLLEGE HOSPITAL

Treatment of Stricture of the Urethra by Dilatation—Three Cases.—First Case.—The first case was that of a man, æt. about 50, who had been sent up to Mr. Boyce Barrow from the country. The stricture had lasted for many years, and the patient had been at various times in the hands of many practitioners. On admission, Mr. Barrow tried to pass a silver catheter, and discovered that a great many false passages existed. Especially were they shown when, the finger being introduced into the rectum, it was found that the instrument was in a false passage, which was quite near to the bowel. The man himself had before stated that he was perfectly aware of the presence of the false passages, each of which he humorously said he was able to refer to under the name of some doctor. After a great deal of trouble Mr. Barrow was able to get a No. 2 into the bladder. No anæsthetic was used, as Mr. Barrow thought it a good thing to go very much by the patient's sensations in cases of false passages. He then tied in the catheter, for, as he remarked, if it were withdrawn there would again be the possibility of getting into the false passages when trying to pass it again ; they would thus be irritated, and they required absolute rest to allow them to heal. The catheter was left in for two or three days, and when taken out a No. 5 was passed without any difficulty and tied in for three days. It was then removed, and a still larger one, No. 7, passed. There was slight difficulty this time, as a trial had been previously made, unsuccessfully, to pass it. Three days afterwards a No. 9 was passed, but not tied in, as metal bougies could be used now the natural passage was open, and the liability of getting into the false passages much lessened. After three weeks the patient left the hospital, although he had not yet learned to pass a metal bougie upon himself, as Mr. Barrow considers so necessary in these cases.

Second Case.—This was a case of absolute cure by metal bougies. The case showed pus in the urine, which, as Mr. Barrow pointed out, comes from the dilated urethra behind the stricture. He treated this patient, a man, æt. about 55, entirely by metal bougies, passing first a small one, No. 1 or 2, but as the urethra was in a septic condition it was not tied in ; another instrument, No. 5, in two or three days to produce further dilatation ; then every two or three days the urethra was further dilated up to 9 and 10, particular care being taken to treat the canal as gently as possible. Every time the stricture was dilated the passage of water was facilitated and the dilatation behind the stricture put into a better condition. Gradually the size of the instrument was increased up to 14, but the intervals were made longer, being augmented to one passage in a week. The patient was then taught to pass the instrument for himself, beginning by himself taking out the bougie passed by Mr. Barrow, and introducing it himself at once. On the next occasion he simply passed the instrument himself in front of Mr. Barrow. If the patient experiences any difficulty, the bougie is introduced by the surgeon until the patient acquires the necessary facility. Metal bougies are the best, Mr. Barrow considers, for the patient to use, as they can be easily cleaned by the patient himself and lubricated with an antiseptic when used, so the patient cannot do himself any harm. The patient is told to pass the instrument at first once a fortnight, and then once a month, and if he neglects this he is always liable to get a subsequent contraction of the passage. The necessity for passing the bougie by the patient becomes less frequent, but it should be done at least once a month. This second case, Mr. Barrow said, had undergone a preliminary treatment by urotropine and rest in bed for a week or two.

Third Case.—The third case had been admitted to the hospital and put down on the list for the operation of perinæal section, owing to the presence of several fistulæ in the perinæum, through which the urine dribbled. Mr. Barrow, on seeing the patient's miserable general condition, decided not to operate at once, but put the man on urotropine and ordered rest in bed for about a week. The patient's condition being then better, he passed a No. 3 metal bougie. He said he would have passed a catheter, but the patient was in too bad a condition for it to be tied in. In a fortnight he had dilated the stricture up to No. 14, when the patient left the hospital with all his fistulæ, which had been very serious, closed up. The patient comes back to the hospital now and then, and the House Surgeon easily passes a metallic bougie.

Mr. Barrow said that strictures could be treated most satisfactorily by dilatation, but a certain amount of discrimination is required as to the method of dilatation. He emphasised his contention that when pus existed behind the stricture to be dilated it was not wise to tie in a catheter, and care should be exercised in passing instruments not to irritate the part of the urethra behind the stricture ; in fact, it was not necessary to pass the instrument right into the bladder as long as the stricture was dilated. He laid great stress on the importance of teaching the patient to pass a metal bougie for himself after the stricture had been dilated by the Surgeon, so that the patient became master of the situation for the future, as he might not always be within touch of efficient surgical assistance. He thought that even when strictures had been divided by operation the patient very often gets recurring trouble if the urethra is not properly kept open, therefore it is well to also teach this class of patients to pass a metal instrument themselves.

The Willesden Council has put forward a scheme for the approval of the Local Government Board for the building of a sanatorium and dispensaries in Willesden for the treatment of consumption.

SPECIAL REPORTS.

THE EIGHTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT LIVERPOOL, 1912.

Fourth Article.

[From our Special Representative.]

The Excursions.

A large percentage of those attending the meeting have availed themselves of the unrivalled hospitality of the medical profession and of prominent citizens of Liverpool. Garden parties, river trips, visits to works and dockyards, inspection of ocean leviathans, motor rides and theatrical performances for lady visitors provided a continuous round of entertainment, combined with gentle instruction to suit all tastes. In this respect there was nothing lacking, while the right royal way in which the civic authorities of Blackpool, Chester, Buxton, Southport, Llandudno and the Isle of Man received and entertained their guests will long be remembered by those who were fortunate enough to participate in one or more of these major excursions. It would be invidious to single out those individuals who spared no pains to make the visit of their guests as happy as possible, and exigencies of space prevent an enumeration of them all. Suffice it to say, therefore, that the Liverpool meeting will go down to posterity as one in which the hospitality shown was of the highest and most lavish description.

The Pathological Museum.

was housed in the Harrison-Hughes Engineering Laboratory of the University of Liverpool, a well-lighted building, which afforded every facility for the comprehensive display of the various exhibits. The material was grouped in fifteen sections, in charge of thirteen honorary sub-curators. The chairman of the Museum Committee was Professor F. T. Paul, and the Honorary Secretary was Professor Ernest Glynn. We may mention a few of the more important features in each section. (1) Tropical Medicine: The exhibit of the Liverpool School of Tropical Medicine, which was awarded a diploma of honour at the International Hygiene Exhibition at Dresden, 1911, was here on view. A series of specimens illustrating the various parasites infecting man was shown, and we noticed a collection of all the known species of tsetse-flies. Dr. Bayon showed some valuable specimens illustrating the bacteriology and pathology of leprosy. (2) Otology: A series of specimens and sections were on view here of the relations of the facial nerve, the semi-circular canals and other portions of the middle and internal ear, lent by Mr. Hugh E. Jones, of Liverpool. Mr. Malcolm Stockdale lent several specimens of aural and nasal interest. (3) Ophthalmological: The Liverpool Eye and Ear Infirmary was well represented in this section with the excellent series of specimens prepared and mounted by Dr. R. E. Harcourt. Another series, illustrating the comparative anatomy of the eye, was lent by Dr. W. T. Clegg, St. Paul's Eye Hospital. (4) Dermatology: The admirable series of photographs and drawings in this section were greatly admired, and were the subject of much comment. A large number were exhibited by Drs. G. Stopford-Taylor and R. W. Mackenna, who also showed their unique collection of wax casts of diseases of the skin, modelled from life at the Liverpool Skin Hospital. A series of coloured drawings, lent by Dr. David Walsh, to illustrate his paper on chronic and recurrent skin affections in heart disease, also attracted much attention. The President of the Section, Professor Walter Smith, and Dr. Louis Savatard, Manchester, also lent specimens and lantern slides. (5) Gynæcology and Obstetrics: A series of twenty-one specimens of sarcoma of the uterus was displayed from the museum of obstetrics and gynæcology: University of Liverpool. Other sarcomatous specimens were lent by the University of Sheffield and also by private exhibitors. Miss Frances Ivens, Liverpool, showed several specimens illustrating tuberculous salpingo-oöphoritis. (6) Alimentary Section. A large number of œsophageal lesions were exhibited, many of them by Dr. Brown Kelly, Victoria Infirmary, Glasgow; while Dr. William Hill showed several instruments, mostly endoscopic, for dealing with diseases of the œsophagus. An interesting collection of concretions from the alimentary canal was lent by Dr. Owen T. Williams, Liverpool. Congenital deformities and specimens of malignant disease were much in evidence, having been contributed by many of the surgeons from Liverpool and Newcastle. Several stomachs were shown containing hair, wool and bits of matting, having been swallowed by lunatics and feeble-minded persons. (7) Cardio-vascular Section: Several interesting specimens of gummata of the heart were exhibited, in some cases associated with the presence of aneurysm. New growths were illustrated by secondary sarcomata, some of them of a melanotic nature. Other specimens included tuberculous pericarditis, lent by Professor Lorrain Smith, University of Manchester, and a series of paintings of infective endocarditis, lent by Professor T. R. Glynn. (8) Genito-Urinary Section: Eighteen specimens illustrated the ætiology of hydronephrosis. Adrenal tumours were illustrated by numerous specimens lent by the Universities of Manchester, Leeds Sheffield, Birmingham and Liverpool. Renal and bladder growths, as well as a variety of calculi, were all to be seen, and constituted a very fine display. Mr. R. A. Bickersteth, Liverpool, showed a series of X-ray prints illustrating the utility of (*a*) catheterisation of the ureters, (*b*) renal pyelography (the renal cavity being filled with collargol solution). (9) Section of Diseases of the Liver, Pancreas, Spleen and Lymphatic Glands: One of the most striking exhibits here was the collection of livers and kidneys, illustrating the neurotic changes found in cases of eclampsia, lent and described by Dr. J. H. Teacher, Glasgow. Some large actinomycotic abscesses of the liver were lent by the University of Liverpool. Specimens of lymphadenoma, tuberculosis, acute hæmorrhagic pancreatitis, among others, completed this interesting exhibit. (10) Section of Laryngology: This was contributed entirely by Dr. Logan Turner, of Edinburgh, and consisted of specimens illustrating sudden death from laryngeal obstruction, malignant and tubercular disease, syphilis, as well as tracheal and laryngeal diphtheria. (11) Section of Miscellaneous Specimens: In this section were to be found numerous examples of sarcomatosis, lent by Professor Beattie; other interesting tumours lent by the University of Liverpool; and a series of different types of sphygmomanometers, among other exhibits. (12) Section of Nervous Diseases: Professor Beattie and Dr. Arthur Hall showed some fine specimens from a case of diffuse neurofibromatosis in a girl, aged 17, in one of which could be seen the tumours growing on the cranial nerves. Several exhibits were shown illustrating tuberculous tumours of the brain, and there was one specimen of a pituitary tumour, together with the skull from a case of acromegaly, lent by the University of Liverpool. (13) Section of Radiography: This section was exceedingly well arranged and contained many exhibits of great interest. Stereoscopic transparencies were shown by Sir James Mackenzie-Davidson, Dr. G. F. Haenisch, Hamburg, and Dr. C. F. Bailey, Brighton. Radiographs illustrating the earliest stages of peri-bronchial phthisis were shown by Dr. Jordan, London. Dr. Knox, London, exhibited a series of microphotographs showing the cell changes in cases of cancer undergoing treatment with radium. Mr. C. Thurston Holland, Liverpool, showed some fine radiographs illustrating renal calculi under different conditions of apparatus, etc. (14) Respiratory Section: An instructive series of specimens here shown were those representing pulmonary thrombosis and embolism, particularly the three showing multiple embolic aneurysms of the pulmonary artery, following thrombosis of the veins of the leg, lent by Professor

Beattie and Dr. Arthur Hall, Sheffield. A rare specimen of tubercular pleurisy was lent by the University of Liverpool. Several morbid growths of the lung and pleura were also to be seen. (15) Section of Modern Anæsthetic Apparatus: Here were found collected together the very latest devices for administering the vapour of ether and chloroform with oxygen, either separately or in various proportions, lent by Dr. Thompson Rowling, Leeds; an apparatus for the nasal administration of nitrous oxide gas, lent by Dr. Francis W. Bailey; the apparatus for intravenous infusion anæsthesia, lent by Dr. G. H. A. Barton, London; and that for the intra-tracheal insufflation of ether, modified from that of Elsberg by Dr. R. E. Kelly, Liverpool, the exhibitor.

The Annual Exhibition,

though approached by somewhat dingy streets and housed in the now disused Gill Street Market, not far from the University buildings, was, by common consent, much better patronised than in some previous years. It was formally opened on the Tuesday by Sir James Barr. Those responsible for its organisation may well be congratulated upon the manner in which the various stalls were arranged, and especially upon the smartly-decorated appearance presented by the interior of the building as a whole. The general excellence of the exhibits was much appreciated by the visitors, and there was never really a dull moment on any of the four days during which the exhibition was open.

Foods and Beverages.

Messrs. Armour and Co., Ltd., of London, were showing, in addition to their well-known nutritive products, "Vigoral," a highly concentrated beef essence, supplied in liquid or in cube form. They were also exhibiting a series of refined animal extracts, including desiccated powder, tablets, and elixir of thyroid gland. The preparations of G. Van Abbott and Sons, London, were of special interest to diabetics, and their biscuits and flour made of bran, gluten, or almond satisfied the most rigid demands of the dietician. George Back and Co., Ltd., London, were there with their well-known "G. B. Diabetes Whisky." Lemco and Oxo (Liebig's Extract of Meat Co., Ltd.) exhibited the penny pure beef tablets, known as "Bifti," which bring their famous meat extract within the reach of all. The same firm's "Fray Bentos Corned Beef" is a delicious product for the table; this and their ox tongues were also on show. The famous Peter's Milk Chocolate was much in evidence at the attractive stall of the Nestlé and Anglo-Swiss Condensed Milk Co., in addition to the firm's numerous brands of sweetened and unsweetened milk. Cerebos, Ltd., were offering a suitable pourer for their excellent table-salt to any medical practitioner not already in possession of one. The various preparations of Messrs. Brand and Co., Ltd., appeared most inviting, especially the beef broth, concentrated beef tea and series of invalid soups. The same firm was also showing their fever food, containing the tonic properties of meat essence, combined with egg proteids and cream, for use in tropical climates. Bovril, Ltd., was well to the front with a most attractive exhibit of their famous blend of meat extracts. Messrs. Fairchild Bros. and Foster were showing, in addition to "Panopepton," a food called "Laibose," containing the solids of whole milk and wheat. The complete food, beloved of infants, known as "Virol," was shown by that firm, and its valuable properties were convincingly demonstrated. At the stall of Messrs. A. Wulfing and Co., the features of "Albulactin," the true milk-albumin, were displayed, and its uses in infant feeding conclusively shown. The same firm also exhibited their well-known Formamint Tablets. Mustard, patent barley, and groats were exhibited by Mesrs. Keen, Robinson & Co., Ltd., The Horlick's Malted Milk Co., Slough, Bucks, were showing their inimitable preparation in the form of tablets, which have been found most acceptable by travellers, motorists, and others. The firm was also showing a novel form of feeder which possessed many advantages over those in common use. Manuel Frères, of Lausanne (Switzerland), were showing their well-known Anti-Putrefactive foods, as used in the Lausanne *régimes.* Angier's Emulsion and Throat Tablets were exhibited by the Angier Chemical Co., Ltd. The Hygiama Foods Co. showed their specialities, Infantina and Hygiama, both favourite foods for infants. At the stall of Messrs. Savory and Moore, we noticed, in addition to their peptonised concentrated milk preparations, "Fructolax," a deliciously-flavoured hydrocarbon jelly laxative, and "Aphrodont" (Dental Foam), an elegant preparation for the teeth, agreeable to use, and having first-rate antiseptic properties. The Pascon Co., London, exhibited an entirely new soluble beef product, consisting of digested fibrin and albumin together, and containing no alkali. Biscuits, cocoa and wine, reinforced with Pascon, were on show. Cadbury's Chocolate and Bournville Cocoa represented the highest ideals in these two products and came in for well-deserved commendation. The Apollinaris Co. regaled visitors with samples of their excellent natural mineral table water, while Vittel Grande Source was to be tried at the stall of the Société Générale des Eaux Minérales de Vittel (Vosges). An attractive exhibit was that of the Buxton Spa, the water of which can now be bottled, being an absolutely pure English Table Water. Messrs. Ingram and Royle showed a number of excellent mineral waters, including those of Carlsbad, Contrexéville, Vichy, Hunyadi Janos, Giesshubler, and Friedrichshall. Some fine samples of cyder were to be tasted at the stall of Wm. Gaymer and Son, Ltd., of Attleborough, Norfolk.

(*To be continued.*)

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Aug. 10th, 1912.

Hysteric and Organic Nervous Affections.

One of the principal signs which permit us, in a nervous affection, to affirm that it is organic and not hysteric is exaggeration of the reflexes, says Prof. Babinski.

Contrary to what was formerly believed, tendinous reflexes are not modified in hysteria; their exaggeration with eliptoid trepidation belongs exclusively to spasmodic paralysis of organic origin.

Hysteria does not produce weakening nor abolition of the tendinous reflexes: this phenomenon is only observed in monoplegia or hemiplegia of organic origin, associated sometimes, perhaps, with an hysterical condition. But the presence, it must be said, of exaggeration of the reflexes is not sufficient in itself to establish a diagnosis in certain cases. Other signs should be sought for, of which the principal are: reflex extension of the great toe, combined movement of flexion of the thigh and pelvis, the sign of pronation of the hand of the affected side.

The reflex extension of the toe, Babinski's sign, is characterised by extension and abduction of the toe on tickling the sole of the foot. This sign alone is sufficient to affirm the organic nature of the paralysis in a large number of cases. However, it is not always present. The sign of combined flexion of the thigh and pelvis may be observed in the following manner:—The patient is placed on a resisting plane, the head supported by a pillow, the body extended in the dorsal decubitus, the arms crossed on the chest. When told to make an effort to sit up, the thigh on the affected side is seen to bend and the heel to leave the ground. This sign is observed in a great number of cases of hemiplegia, and would seem to be due to the fact that such patients have less strength than normal individuals, and are not capable of maintaining the extension of the thigh on the pelvis.

The sign of pronation can only be observed while the hemiplegia is still flask. If the hand of the patient is placed in supination, on the healthy side, it keeps naturally this attitude and without difficulty, while on the affected side, immediately it is left to itself it returns to pronation.

External Treatment of Œdema.

Everyone knows by experience how tedious and unsatisfactory is the treatment of extensive œdema of the lower limbs by internal remedies. A simple treatment based on the physical phenomenon of osmosis has been tried with unvarying success by Dr. Pathault. It consists in wrapping around the limb a compress steeped in a strong solution of common salt (one ounce to the quart), and covering with absorbent cotton wool maintained with a bandage. This dressing is left on all night. The following morning one is astonished at the amount of liquid that has filtered through the wool; the sheets and mattresses are sometimes soaked. After a few days of the treatment the œdema has disappeared. The author affirms never to have met with failure, although he treated numbers of cases of œdema due to various causes—heart or kidney disease, phlebitis, and sclerosis.

The internal treatment should always be continued, or otherwise the œdema returns if the cause persists, but the external treatment, by relieving the tissues, facilitates considerably the action of the internal treatment and eases the efforts of the heart.

Hypertrichosis.

The slight down which sometimes ornaments (?) the upper lip of young ladies may be effectually treated by the following ointment, provided it is continued for a long time—a year at least. It is put on at night.

Acetate of thallium, 6 gr.
Oxide of zinc, 4 dr.
Lanoline, 1 dr.
Rose water, 1 dr.
Vaseline, 5 dr.

Erysipelas.

Tincture of iodine, 1 oz.
Spirit, 1 oz.
Guaiacol, ½ dr.

Paint on the inflamed surface; rapid cure.

GERMANY.

Berlin, Aug. 10th, 1912.

At the Gesellschaft der Charité Aerzte, Hr. His gave an account of investigations into the

Softening of Gouty Tophi.

However the subject of gout, he said, was attacked, there still arose fresh and fresh problems. They knew that under the name of tophus there were deposits of uric acid salts (principally urate of sodium), which in the shape of the finest needles crystallised out in the tissues, and there often formed compact lumps, sometimes of quite a large size. It was known that such a tophus, when once formed, did not with absolute certainty maintain its original size. It might become absorbed under inflammatory symptoms; it might grow gradually or by fits and starts; it might become less, and the diminution in size might take place under very remarkable colliquation. In the case of an officer aged 28 who had suffered from a severe attack of gout when young, large tophi formed in the mucous tissues of the back of the hand and in the region of the joints of the feet. In the course of treatment one of these tophi melted away. After it had been hard it liquefied, and with a Pravaz syringe one could draw out a fluid having a cloudy serous appearance. Within the fluid were a large number of leucocytes, which were completely loaded with débris of urate crystals, the leucocytes representing phagocytes. That was one of the possible courses towards recovery from tophi. The tophi of the subcuticular tissue were known; tophi of the ear almost always lay in the subcutaneous tissue, scarcely ever in the cartilage. But there were also cutaneous tumours. Lecorché had paid special attention to them. Showing some illustrations from Lecorché's work, he continued: They saw the skin covered with small vesicles. Whoever saw these for the first time would take them for pemphigus or pustules. They had a yellow look, and were surrounded by a red areola. If they were opened, a thick chalky like mass exuded, which consisted of innumerable needles of urates.

Such tophi might form very rapidly. During an attack of gout in one of the speaker's patients, in which several joints were affected, such a tophus formed in a night, and in the morning there was a tophus the size of a pea on the hand that completely fitted the description given by Lecorché.

We could reproduce several processes in these tophi artificially, when we injected uric or urates under the skin of rabbits or other animals. In this way we could follow the reactions beautifully.

When such a deposit was made the nuclei were at first destroyed; they appeared to be quite broken up and lost their normal structure. In a few days new cells forced their way in from the periphery; these were not destroyed, but remained with well-coloured nuclei. About the fourth day a process of phagocytosis began. The bodies of the cells were found to be filled with débris of urates. Some of the cells were small, and contained but one nucleus, others were multi-nuclear giant cells, which contained fragments of crystals.

Thus, not only chemical solution but phagocytosis played a part in the disappearance of tophi. If an examination of the parts immediately adjoining the deposit of urates was made, many cells would be found filled with débris of urates; farther away such cells were no longer to be seen. In spite of this, however, it could be proved that these cells wandered still farther. For example, if Indian ink was introduced into the deposit, the regionary lymph glands would be found to be filled with cells with inky contents. In these cases, however, crystals would be seen no more. The cells were in a position of being able to dissolve the crystals or to destroy them chemically.

In gout of the human subject, the masses of urates were covered in by an extraordinarily firm connective tissue, poor in cells, that passed through them and divided them into septa and dissolved them in individual groups. The immediate surrounding of the crystal deposit consisted of an infiltration wall containing cells in which pronounced giant cells similar to the giant cells of tuberculosis were present, with numerous nuclei arranged in order.

Benella was the first to show such needles of urates in the bodies of such cells. Amongst the contents of the rapidly formed skin tophi were glands consisting of numerous radially arranged urate needles, betwixt them a few red blood corpuscles that had come away through the puncture, and a small number of leucocytes. If the preparation were coloured it was seen that the nuclei, as in the animal experiment, were mostly broken and had lost their structure. Here also, as in the animal experiment, there was no phagocytosis the first day.

In that case, however, in which a tophus had existed for a longer time the phagocytosis could be recognised plainly; almost all the cells, which were all mononuclear, showed more or less remnants of crystals in their protoplasm.

It could be shown, therefore, that in the human subject, as in the animals experimented on, under certain circumstances the resorption of the tophi of urates took place by way of phagocytosis

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HUNGARY.

Budapest, Aug. 10th, 1912.

X-Ray Therapy in Trachoma.

Some two or three years ago Cassidy and Rayne reported favourable results in the treatment of trachoma and Roentgen rays. In Hungary Dr. Imre has experimented with the X-rays in seven cases, from which he draws the following conclusions: (1) The effect of the X-ray therapy on the trachomatous process is beyond doubt, as evidenced by the decrease of the infiltration, the disappearance of the granules and the pannus, and a marked improvement of the subjective painful sensations. (2) It can be stated in a general way that the trachomatous granulations tend toward slow disappearance under the influence of radiotherapy; its influence on the infiltration is more marked; pannus is very favourably affected by the method of treatment. (3) Dr. Imre is unable to report a single case of complete cure of the trachoma, notwithstanding the great number of sittings, owing to frequent interruptions, the consistence of the tubes, which exert a certain effect on the power of the rays as emanating from the radiogenous tubes. (4) The tendency of the tissues to cicatrisation was rather insignificant under this line of treatment. (5) As compared with other methods of treating trachoma (the expression of the granules, etc.), X-ray therapy is rather less effective in the form of trachoma unattended with deep infiltration (the so-called follicular conjunctivitis). (6) Dr. Imre failed to observe any harmful results from radiotherapy, either directly to the eye or in the form of any dermatitis. (7) Radiotherapy is entirely painless. (8) Those cases of trachoma which are not amenable to the ordinary method of treatment, or which proved unyielding to same, are beneficially influenced by the X-ray treatment, and should be subjected to it. Finsen's method is as yet *sub judice* in ophthalmological practice. As regards trachoma, some authors recommend ultra-violet rays as obtained from quartz lamps, but the results cannot as yet be given with any positiveness.

Stovaine as a Local Anæsthetic.

Dr. Nargyas reports some thirty various operative cases in which this anæsthetic was employed, including the opening of deep paraproctitis, the excision of a cancer of the lower lip, hydrocele, Bassini's operation for hernia, strumectomy, etc., the drug being used in one-half per cent., three-quarters per cent., and one per cent. solutions (in water), the total quantity used 0.12. He summarises the results as follows:—(1) Complete anæsthesia was obtained in all thirty cases. (2) There were no symptoms of poisoning in any of the cases, as evidenced by the pulse, respiration, reaction of the pupils, and the central nervous system. (3) The anæsthesia ensues almost at once, so that the operation can begin immediately after the injection. (4) The effect lasts about twenty minutes, and it is distinctly circumscribed, never extending beyond the infiltrated tissues. (5) The wounds do not bleed any more than at other operations, although stovaine is counted among the vaso-dilators. (6) Contrary to cocaine, no hyperæsthesia was ever observed after the effect of the drug had ceased. (7) The weaker solutions are as effective as the one-per cent. solution.

The Frequency and Diagnosis of Appendicitis During the Puerperium.

At the last meeting of the Interhospital Medical Association, Dr. Zombor read a paper on the above subject. He said that the frequency of appendicitis during pregnancy is not greater than out of it. Perhaps, indeed, it is less frequent, because in women the appendix is not infrequently affected by extension of inflammation from the adnexa, and such infected women are likely to be sterile. It is rather easy to make mistakes with regard to the existence of the affection. In one case, recently seen, a patient was supposed to be suffering from typhoid fever, but there was immediate improvement after the incision of a large abscess. It is difficult to map out the induration of appendicitis in pregnant women, but if the patient is put on the left side in order to allow the uterus to drop out of the way, this can usually be accomplished. Acute septic conditions in the puerperium often come from the appendix. Sub-acute infections come from the ovaries. It is not always easy to differentiate ectopic pregnancy from appendicitis, and sometimes it will be found that the appendix is adherent to an ectopic gestation sac. Intra-pelvic appendicitis is extremely difficult to differentiate from other pelvic affections, and at times may be mistaken for intra-pelvic phlebitis, or may give rise to suspicion of some infectious thrombosis of the intra-pelvic veins. In these cases, however, unless there is confirmation of the suspicion by the occurrence of phlegmasia in the leg, it is easy to suspect appendicitis and treat for that condition. Undoubtedly the statistics of appendicitis in pregnancy, as so far given, have been too unfavourable. It has been said that most of the mothers perished and very few of the children lived. As a matter of fact, however, if the case is taken in time, the great majority of the mothers will be saved and the pregnancy will continue to term. On the other hand, another important reason for not delaying the operation in these cases is that at times a dead fœtus has been found, and with the colon bacilli present in the cord, and evidently the cause of the death as the result of communication of the infection from an untreated appendicitis. Marks had suggested (said Zombor) that in the later months of pregnancy premature labour should be induced and then the appendicitis treated. Pinard's advice is better, however. He says, treat appendicitis without any attention to the woman's condition, and it will usually be found that the pregnancy will go on to term. The advisability of operating even for mild symptoms that occur early in pregnancy has been suggested in order to avoid the dangers of the subsequent course of the case. Unless there have been well-marked symptoms, however, the appendicitis may only have been catarrhal and not necessarily suppurative.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

BELFAST.

The Insurance Act.—A joint meeting of the Belfast Division of the British Medical Association and of the Belfast Medical Guild was held in the Medical Institute on Thursday evening, August 8th, to which every registered medical practitioner in the city was invited. The agenda included the consideration of a guarantee fund and a discussion on a Public Medical Service, but little time was found for these, as most of the evening was taken up with a report on the doings of the Representative Meeting of the British Medical Association, and a discussion on matters connected with sanatorium benefits. No resolutions were submitted, but the meeting accomplished the purpose for which it was summoned—to keep the members in touch with all that is being done in connection with the Act.

Londonderry County Council and Sanatorium Benefits.—At a meeting of this Council, held on August 9th, a long discussion took place on the appointment of a Tuberculosis Officer. It was proposed to appoint an officer temporarily from next January, at a salary of £350, with £50 travelling expenses. Mr. McCarthy, the Local Government Board Inspector, expressed a doubt about the Council obtaining the services of a good man at the figure named, and said that some of the other counties were offering a little more. After some discussion it was decided to postpone making the appointment till October, and meantime to advertise it.

Belfast District Lunatic Asylum.—The annual report of the Medical Superintendent, Dr. William Graham, has just appeared, embracing the medical statistics for 1911 and the financial accounts for the year ending March 31st last. The admissions were 17 per cent. less than the previous year, and included 99 males and 134 females, 233 in all. The total number under treatment was 1,474. The discharges were 130, of whom 87 were recoveries, a ratio of recoveries to admissions of 37.3 per cent., and to the number under treatment during the year 5.9 per cent. The net cost of each patient chargeable to the city is £11 18s. 6d. The villa colony system, of which Dr. Graham is so enthusiastic an advocate, seems to be working very well, but a sum of about £88,000 will still be necessary before it can be completed and all patients transferred from the old town asylum to the villa colony at Purdysburn. The Inspector of Lunatics, Dr. W. R. Dawson, strongly supports Dr. Graham's plea for the hastening on of the new buildings and the completion of the new system.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE SOURCE AND DATE OF THE ORIGIN OF SYPHILIS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—The recent discussion of the *early history* and present knowledge of SYPHILIS very appropriately contributed to the inauguration of the new domicile of the Royal Society of Medicine. And the perusal of the report of the same has once more brought impressively home to me the existence of the too obviously chronic—indeed, apparently, in some degree incurable —defect of our present theory and practice : that which owes its corroding influence to the negative opportunities afforded by the *non-existence* of a *continuous chain of medical tradition* and of an associated authoritative (selecting, filtering) and transmitting body (of the most enthusiastically devoted and most highly accomplished of living professional experts), in every succeeding generation. Slight, indeed, is the prospect of the attainment of such consummation within the boundaries—and by the methods—of the British Empire, as we know it! I do not here propose to examine the significance of the allusions of the " Father of Medicine " or of his great apostle of Pergamum, convincing as they are to me personally. I shall begin with a witness of the *Middle* (known to presumptuous ignorance as the " *DARK* ") *Ages.*

GULIELMUS DE SALICETO, " insignis medicus et chirurgus," flourished at Verona in the middle of the " thirteenth, the greatest of centuries " ; and died in the year of grace 1280. His treatise on surgery—necessarily in MS.—was epoch-making, and was one of the earliest of its class to engage the active attentions of the representatives of the novel art of printing : *Incipit Cyrurgia Magistri Guilielmi de Saliceto placentini.—Explicit opus Guilielmi de Saliceto in Cyrurgia Placentiæ impressum ad exemplar originalis ipsius Magistri Guilielmi. Anno ab incarnatione domini M.CCCCLXXVI. die XV. Maii.*

(And here it is interesting to recall the fact that FRACASTORIO, the author of the poem *Syphilis*, and the inventor of the name, was also a *Verona* physician.)

The subjoined sectional paragraph will, I believe, prove as interesting to all inquiring readers, as its contents must surely prove convincing to all reasonable ones :

"*DE PUSTULIS ALBIS ET SCISSURIS ET CORRUPTIONIBUS, QUÆ FIUNT IN VIRGA ET CIRCA PRÆPUTIUM PROPTER COITUM CUM MERETRICE VEL FŒDO AB ALIA CAUSA.*

" Hæc ægritudo semper accidit ex frigido vel materia ventosa *retenta inter præputium* et *pellem virgæ*, et quia non exspirat, crescit et multiplicatur in loco. Vnde cum neglecta fuerit in principio—*iterum aliquando multiplicatur*, quia *corrumpitur pellis* et *denigratur, et corroditur cum hac substantia virgæ*, quæ amplius restaurationem non recipit. Et accidit *cum* hac *corruptione febris* et *fluxus sanguinis*, et *mors* multoties. Cura festinanda est—mundificetur—inuoluatur—donec corruptio remota fuerit. Si vero non remoueri possit, et in tantum augmentata sit, quod *denigrauerit locum*, tunc signum est mortificationis. Tunc intendas remotionem denigrati corrupti radicitus, si est possibile, cum ferro ignito separando corruptum a sano, quia si hoc subito non fieret, non cessaret corruptio augmentari, donec totum membrum corruptum foret. —Attende hic, quod ablutio cum aqua frigida et abstersio cum petia munda, et iterum ablutio, dum incipit *post coitum cum fœda muliere* aliquod *corruptionis futuræ vestigium*, defendit perfecte virgam a corruptione futura, saltem ob illam causam, maxime si post illam ablutionem fiat roratio et quædam ablutio, vel loci iam abluti aspersio cum aceto modico aut petiis in aceto infusis virga totaliter inuoluatur. Puluis hermodactylorum valde vtilis est *porris virgæ* et aliis corruptionibus."—If the above quotation does not represent an easily recognisable, and thoroughly reliable, description of the clinical entity which became known to remote posterity as *Syphilitic PHAGÆDENA* we must, I fear, begin to lose all faith in the reliability of written testimony!

There are many—very many, indeed—other witnesses to similar clinical facts, in the annals of each of the civilisations of which any medical record has been preserved. So we need not wait to discuss the case of the patriarchal infection of the house of Pharaoh (" because of Sarai, Abram's wife "), or that of Job (although accepted as genuine by the highest expert authority of the CHURCH), or that of David (" Oh, Lord ! heal me, for my bones are vexed.")

But the courtly John of Gaddesden—who secured special celebrity and success by adopting at the English Court the *scarlet* treatment of *small-pox* which had been employed in " far Cathay " since time immemorial—also gives in his famous *Rosa Anglica* (*circa* 1305 A.D.) highly suggestive sanitary counsel ; quite skilfully formulated so as to anticipate sexual infection, and neutralise the consequences of its occurrence : " *Sed si quis vult membrum ab omni corruptione seruare, cum recedit a muliere, quam habet suspectam de immunditie, lauet* illud cum aqua frigida cum aceto mixta, vel de vrina propria *interius* vel *exterius intra præputium.*—In illo vino madefiat pannus lineus vetus, et superponatur loco ægro : *Vulnus* enim *desiccat*, et *cancrum interficit et vlcerat.*" I must, of course, leave to the " private judgment " of the reader whether the suggestions embodied in the above sentences were likely to have been inspired by the consciousness of a pervading necessity for prophylactic defence of the delicate pseudo-membranous surfaces against the contact infection of gonorrheal balano-posthitis. And a further spring, upwards in latitude and downwards in time, brings us to a proclamation of the Caledonian monarch, James IV. : " It is our Souverane Lords will and the Commend of the Lordis of his Counsale, send to the Provost and Baillies within this *burt*, that his Proclamation follow and be put till execution, for the escheving *of the greit appearand danger of the infection of his Leiges fra this contagious sickness, callit the Grandgor*, and the greit uther Skayth, that may occur to his Leiges and Inhabitans within this burt, that is to say, we charge straitly and commands be the Authority above writtin, that all manner of personis, being within the freedom of this burt, *quilks are infectit or hes been infectit uncurit with this said contagious plage, callit the Grandgor*, devoyd, red and pass furt of this Town and compeir apon the sandis af Leith, at three hours before none ; and thair sall thai have and fynd Botis reddie in the havin ordanit to them be the Officeris of this burt, reddely furneist with victuals, to have thame tho the Inche, and thair to remane quhill God proviyd for their Health. And that all uther personis, the quilks taks upon thame to hale the said contagious infirmity and taks the cure thairof, that they devoyd and pass with thame sua that nane of thair personis, quhilks taks sic cure upon thame, use the samyn cure within this burt in pus nor peirt any manner of way. And wha sa beis, foundin infectit and not passand to the Inche, as said is be *Mononday* at the Sone ganging to, and in lykways the said personis, that takis the said Cure of Sanitie upon thame gif they will use the samyn thai and ilk ane of thame, salle be brynt on the cheik with the marking Irne, that thai may be kennit in tÿm to cum and thairafter gif any of tam remanis, that thai sall be banist but favors."

The preparation and promulgation of the above document were hardly attributable to fear of the contagion of blennorrhagia, or to any instinctive loathing of the national " YOUK " ; which then formed as distinctive an item of the Caledonian outfit as the *tartan* or the *bagpipe*. But it bears date, indeed, of the year 1497; which, as the advocates of the Columbian source of the original *lues venerea* may suggest, is quite compatible with their own view. (The date is, of course, reminiscent of the Borgian gifts of the *first* "first meridian" to the world, in general; and the University of Aberdeen to Scotland, in particular.)

The discussion was, very appropriately, opened by Dr. Norman Moore; who is well known throughout the whole professional world as one of its most gifted and accomplished citizens—celebrated as highly for his general scientific and literary and historic attainments as for his rare professional skill and acumen. I was somewhat surprised, accordingly, to find his opinion on this question ranging with that of the orthodox "general"; and must close with the expression of some faint hope that he may still see his way to modify the same.

I am, Sir, yours truly,
John Knott.

2, Sallymount Terrace, Ranelagh, Dublin.
July 25th, 1912

THE NECESSITY FOR A NECROPSY IN EVERY CASE OF DEATH.

To the Editor of The Medical Press and Circular.

Sir,—In his usual terse and graphic style, Dr. J. C. McWalter, in the paper appearing in your current issue, deals with the above subject. From the point of view of the sciences of medicine and statistics, the Registrar-General's records in these islands are grossly incorrect and misleading. For a long time my attention has been directed in this matter to the certification of infantile death. If the returns are looked through, I doubt whether one per cent. are put down to one of the most frequent causes of death, namely, improper feeding. Many of these cases ought to have also ascribed as a powerful contributory cause, the use of baby-quieting quack medicines. It still remains the fact, in spite of recent successful attempts in some localities to disseminate knowledge among poor mothers, that infants in vast numbers are fed, instead of upon milk, upon all kinds of foods with which their digestive organs are no more able to act than they could upon so much bran or sawdust. The baby is in frequent pain, and is as often dosed with soothing syrup which, although now rarely containing morphia, is made up of some cheap carminative with enough alcohol to relieve temporarily the colic. The end is very often death from convulsions or diarrhœa. In nine cases out of ten the certificate gives one of these maladies as the cause of death, if it do not set it down to "teething." Teething is a physiological process, never pathological, and to ascribe a death to this process of development is about as scientific as to set it down to a visitation of God. I enclose my card, and beg to subscribe myself

Yours truly,
Statistician.

Birmingham, August 9th.

"IN VAIN IS THE NET, ETC."

To the Editor of The Medical Press and Circular.

Sir,—Mr. Lloyd George's latest attempt to placate or cajole the profession is made through the medium of the *Nation*, not a very happy choice, seeing that this paper—as you have been obliged on several occasions to point out—has too frequently distinguished itself by depreciation of medical science and gratuitous disparagement of medical practitioners. A recent number, however, contains an article by Mr. Lloyd George on the Insurance Act. After reference to the fact that the Commissioners had invited over 30 medical men on to the Advisory Committee, and that they had held "useful and amicable" conferences, Mr. Lloyd George expresses his confidence that when the new regulations are published they will be found to contain provisions which will remove some of the most anxious fears of practitioners as to the conditions under which practice will be carried on under the Act. He thinks that the profession will find that they are amply safeguarded against the danger of being subjected to a kind of disciplinary jurisdiction, exercised by a body of laymen, in matters which are peculiar to their own profession. He goes on to declare that it is the desire of the Government to pay the medical profession fairly. He holds that the Plender report proves that the financial basis upon which remuneration was computed was not as wide of the mark as some violent critics have affirmed, but if a case is made out for a further financial provision the Government are prepared to recommend the House of Commons to increase the grant. Sir William Plender's report will, he thinks, be of great assistance in the completion of the task, and they are willing and anxious to receive any information which will further assist them in arriving at a just conclusion. When the report of the Committee reaches the Commissioners they will be in a position definitely to advise the Government as to what addition (if any) it will be reasonable to make for the remuneration of the profession. It is difficult to guess what object Mr. Lloyd George considers likely to be gained by this pronouncement. It will no doubt serve as a much-needed advertisement for the *Nation*, but it will hardly have more weight with the men to whom it is addressed than the similar empty verbiage with which they have already been regaled literally *ad nauseam*.

I am, Sir, yours truly,
An Obscure Practitioner.

August 6th.

OBITUARY.

DR. T. L. ROGERS, OF ELTHAM.

We regret to announce the death of Dr. Thomas Lawes Rogers, which took place at Eastbank, Eltham, on August 7th, at the age of 83. The deceased was the third son of the late Mr. Joseph Walter Goddard Rogers, of Alvediston, Wilts. He qualified as M.R.C.S. and L.M. in 1853, M.D.St. And. in 1857, becoming M.R.C.P. in 1860. In 1854 he joined the first battalion of the Coldstream Guards. With this regiment he went through the Crimean War, and was granted a medal and clasp for that campaign. He retired from the Army in 1858 and became Medical Superintendent of the Rainhill County Lunatic Asylum, Lancashire, where, before his service with the Army, he had temporarily acted as Assistant Medical Superintendent for a year. Dr. Rogers retired in 1888 and devoted the remainder of his life to voluntary work on various committees, such as the Charity Organisation Society, the Workshop for the Blind of Kent, and many others, in which he was associated with his lifelong friend, the late Mr. Brooke Lambert.

In 1893 he was elected a member of the Managing Committee of the Dreadnought Seamen's Hospital at Greenwich, where he took not only a great interest in converting an old and unsuitable building into a properly equipped hospital, but he was also one of the promoters in the work of organising the new School of Tropical Medicine at the London Docks.

He was elected Vice-President of the Seamen's Hospital Society in 1909. He married in 1863 Henrietta, the eldest daughter of the late Admiral C. H. Binstead, Deputy-Lieut. for the County of Yorkshire, and leaves one son and five daughters.

MR. J. S. SEQUEIRA.

We regret to announce the death of Mr. James Scott Sequeira, M.R.C.S., L.S.A., of Crescent House, South Hackney, which took place on the 9th inst., at a nursing home, a few hours after an operation. The deceased, who was 84 years of age, was the son of Mr. James Sequeira, of Aldgate and Bow Road, E., surgeon—a profession which has claimed the services of six members of the family. His great-grandfather, Isaac Henrique Sequeira, M.D., a native of Lisbon, was the first of the family to settle in London. As a physician he was a notable man, and died at Mark Lane in 1816, when he was the oldest Licentiate of the Royal College of Physicians. The family in Portugal had long practised as physicians, Dr. Henrique's grandfather and two uncles having all been of that profession. As a consequence Mr. Sequeira brought unusual experience and ability to aid him in his profession. Born in High Street, Whitechapel, he practised under his father at Jewry Street, Aldgate, and then at Leman Street. In 1852 he went to Australia and returned in 1857, and in 1860 he served an appointment at Limehouse. For 21 years he was Treasurer of the East London Industrial School and Medical Officer, and for 47 years manager at St. Mark's, Whitechapel. He was also Manager under the London School Board at Old Castle Street Schools and at Gainsborough Road Schools, and for 34 years Medical Officer to the Whitechapel Union. Mr. Sequeira was a Member of the North-East London Clinical Society and a Member of the Council and Trustee of the City of London Entomological Society.

Mr. Sequeira retired from active practice about 15 years ago, and his wife died shortly after. He leaves an invalid daughter and three sons, of whom the eldest follows the family profession, the second is a clergyman, and the youngest a Surgeon in the Navy. Mr. Sequeira had been blind for some years.

REVIEWS OF BOOKS.

EDUCATION. (a)

The question of education is one of the most important of our highly progressive, or, at least, continuously restless, twentieth century. Its problems have to be considered by every reasoning member of every one of our civilised communities; by female and male, by the private voter as well as by the public official. The doctrine of formal discipline, as the author of this suggestive volume impressively indicates, was implied in the educational practices of the Greeks and the Romans, dominated the ideals and methods of scholastic education, and culminated in the barren formalism and logical subtleties of university disputations. But the doctrine was first clearly formulated as an education theory in the seventeenth century, especially by Locke. As any clear-minded observer would have anticipated, the progressive modification of environing circumstances and conditions tended to modify and alter, *pari passu*, the special requirements of education. The modern view came to regard the *process* of learning as the one thing needful, and not the items of mental furniture introduced by its efforts. This view, which came to flourish in the eighteenth century, was something of a reactionary movement towards that of mediæval scholasticism; and the succeeding swing of the pendulum in the opposite direction was the vigorous repudiation of the pedagogic Herbart in the first quarter of the nineteenth century. In his system, which has experienced both wide diffusion and strong support, the important question is: what experience can the child be made to assimilate? "Mental power is a function of the organised experience of the individual." In the preceding generations, discipline of the *memory* took precedence of all other mental exercises; and its most efficient training was afforded by "the mastery of material which had no inherent interest for the child." Of course, a reactionary wave of formal discipline again swept over civilisation. The conflict between the claims of the classics and mathematics, on one side, and the natural and social sciences, on the other, came to distinguish the third quarter of the nineteenth century; and to furnish ample employment for the minds and pens of leading doctrinaires. Huxley and Herbert Spencer were the most vigorous protagonists for the claims of the sciences. Both were far more lightly equipped than the average members of their respective audiences seemed ever to conceive; the former, although an expert in "natural" science, knew nothing of the Aristotelian philosophy and scholastic theology which he presumed to depreciate and professed to be able to overturn.

In this well written and "practically" philosophic volume Professor Heck gives the reader a very admirable summary of the most important views that have been held and defended by the most important authorities of recent times. The subject is so vast that it is, of course, quite impossible to discuss the varied opinions—and modes of practice thereon founded—within the limits of a review. Accordingly, we conclude by recommending the reader to learn and mark, as well as inwardly digest, the contents of this volume. We confidently guarantee the wholesome quality, as well as taste and flavour, of the contents.

Medical News in Brief.

The Treatment of Tuberculosis in Ireland.

At a recent meeting of the Joint Committee of the Irish medical profession held in Dublin, the following resolution was passed:—

"That in consonance with the action taken by the British Medical Association the medical members of the Irish Advisory Committee be called upon to resign."

The Committee also resolved "That all practitioners be called upon to refrain from accepting any post or office in connection with the administration of sanatorium benefit until the lines on which such benefit is to be administered shall be approved by the Committee." Another resolution appealed to the Local Government Board not to sanction the appointment of any chief tuberculosis officer who has not had such experience and was not of such standing as would command the confidence and enlist the co-operation of the practitioners with whom he would have to work; and a fourth resolution, while appreciating the great work already done by the Women's National Health Association, expressed its strong disapproval of the action of that body "in attempting to usurp the functions and powers of the statutory local authorities in regard to the establishment of sanatoria and tuberculosis dispensaries under the Insurance Act and the Tuberculosis Prevention Act."

The Committee further adopted certain principles as essential to the efficient working of the tuberculosis dispensaries. The chief of these are that the chief tuberculosis officer should be a whole-time officer at an annual salary of not less than £400, excluding travelling expenses, and that his duties should be confined to organisation and to consultation with the medical practitioners in charge of the patients; and that the treatment of the patients should be carried out by their usual medical attendant at a scale of fees for each visit to be arranged locally with the administrative authority by the local medical committee.

Annual Meeting of the British Dental Association.

The thirty-second annual general meeting of the British Dental Association opened in Glasgow last week. Twenty-five years have elapsed since the association have met in annual conference in the city, and a cordial welcome was extended to the representatives, numbering fully 350, who took part in the proceedings. The meetings were held in the University, where the members were received by Professor T. H. Bryce, Regius Professor of Anatomy, in the absence of Principal Sir Donald MacAlister. The gathering which took place in the Bute Hall was largely attended. After an address by Professor Bryce, Mr. W. B. Paterson, the retiring president, delivered his valedictory address, and was presented with a presidential badge by Mr. J. H. Badcock. Mr. Rees Price was then inducted to the office of president, and delivered his inaugural address. Mr. W. A. Rhodes,

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(a) "Mental Discipline and Educational Value." By W. H. Heck, M.A., Professor of Education, University of Virginia. Pp. 308. London: John Lane, 1912.

Cambridge, was elected president-elect of the association. In the evening the members attended a reception in the City Chambers given by the Lord Provost and Corporation.

The Royal Maternity Charity of London.

An appeal on behalf of the Royal Maternity Charity of London, 31 Finsbury Square, E.C., has recently been issued, signed by Princess Christian, President; Evelyn Lady Stanhope, Lady Iddesleigh, Lord Avebury, Treasurer; Mr. R. Inigo Tasker, Chairman; Mr. John Whittington, Vice-Chairman; and Drs. Septimus Sunderland and Henry Russell Andrews, Physicians.

It is stated that for 155 years the Royal Maternity Charity of London has been helping the very poorest married women whose position, but for timely assistance, would be helpless and hopeless. At the most momentous time in a woman's life the Charity sends its nurses and doctors, and supplies medical comforts to alleviate the suffering of those who have to face the ordeal in a state of destitution. When it is seen that the subscriptions only amounted to £365 10s., with the meagre sum of £92 in donations, during the past year, and that 2,102 cases were attended, it will at once be manifest how hopeless the position of the Charity must soon become without the help of a large number of new subscribers and donations specifically given towards the liquidation of the debt. Few expenses are incurred in the management of the Charity, as compared with lying-in hospitals, beyond the payment of a secretary and small fees to the doctors and nurses, and contract charges for medicines. The institution has helped over 564,000 poor married women since its inception.

A Special Tuberculosis Exhibition.

An exhibition of appliances, fittings, materials, and products relating to sanatoria, tuberculosis dispensaries, and the treatment of tuberculosis will be opened on August 26th at the Offices of the Society of Medical Officers of Health, 1 Upper Montague Street, Russell Square, London, W.C.

A special section will be devoted to the heating and lighting of sanatoria, dispensaries, and institutions generally, and numerous exhibits will deal with the preventive and curative aspects of the problem of tuberculosis in the United Kingdom. It is intended to keep the exhibition open for twelve months, the exhibits being varied and added to as improvements occur.

The Hospital Sunday Fund.

At the last meeting of the Council of the Metropolitan Hospital Sunday Fund, held at the Mansion House, the Lord Mayor, Sir T. Boor Crosby, M.D., presiding, it was reported that the total of the fund to August 2nd amounted to £52,300, which added to the £5,661 distributed last December, brought the total for the year up to £57,961. This year 257 institutions had applied for grants from the fund, being two less than in 1911, and the Committee now recommended the distribution of £52,294 to the several hospitals, institutions, dispensaries, and nursing associations, as shown in the appendix. The Committee had been informed that it was the intention of the Brixton Dispensary to participate in the proceeds of Sunday cinematograph shows, but to the best of their information nothing had yet been received from this source by the dispensary. The Committee, while recommending an award this year, were of opinion that the governing body of the dispensary should be informed that no grant could be made in future if their intention was carried into effect. Seven and a-half per cent. of the total sum available for distribution was appropriated to the purchase of surgical appliances during the ensuing year, and 2½ per cent. for district nursing associations.

The following resolution was then passed:—"The Committee of Distribution, having been informed that the sum allowed by them as the average cost for out-patient attendance has given rise to some dissatisfaction, recommend that the question be again investigated before next year's distribution. The Council therefore request the Distribution Committee to make such investigation, and for this purpose empower them:—(1) To add to their number any gentlemen whose advice and assistance may be desirable; (2) to incur any reasonable expense in the examination of the accounts of the out-patient departments of the hospitals."

The various awards recommended by the Committee of Distribution and approved by the Council for 1912 were then read.

The Oxford Ophthalmological Congress.

As the outcome of a discussion upon miner's nystagmus (neurosis), which was held on July 19th last, at a meeting of the Oxford Ophthalmological Congress, the following resolution was unanimously passed:—"That, in the opinion of the Congress, the character of the illumination is the chief factor in the production of miner's nystagmus, and that a Departmental Committee should be appointed to make inquiries into and report upon the exact conditions under which the disease occurs."

The Middlesex Hospital Medical School.

The following scholarships, medals, prizes and certificates have been awarded to the successful students for the winter and summer sessions of 1911-12:—

Scholarships.—Second Year's Exhibition, S. W. M. Jones; Hetley Clinical Prize, T. L. Hardy and C. Helm, prox. acc.; Freeman Scholarship, L. C. Rivett; Lyell Medal and Scholarship, T. L. Hardy; First Broderip Scholarship, T. L. Hardy; Second Broderip Scholarship, E. A. Wilson and H. J. S. Shields, equal.

Prizes.—Inorganic Chemistry, D. A. R. Aufranc; Organic Chemistry, D. W. J. Andrews and W. H. Lloyd, equal; Physics, D. A. R. Aufranc; Biology, H. W. Lewis; Practical Pharmacy, A. B. Hacking; Histology, W. T. Warwick; Embryology, L. G. Phillips; Physiology, L. G. Phillips; Practical Anatomy, S. W. M. Jones; Anatomy, S. W. M. Jones; Bacteriology, F. H. Kelly; Pathology, A. O. Gray; Forensic Medicine and Public Health, A. O. Gray; Pharmacology, R. H. Fleming; Practical Midwifery, A. O. Gray; Practical Surgery, A. O. Gray; Midwifery, G. E. Beaumont; Surgery, C. Helm; Medicine, A. O. Gray.

Numerous certificates of merit were also awarded to other students at the close of the session.

Apothecaries' Hall of Ireland.

The following are the results of the July examinations:—

Primary Professional Examination.—Passed in Chemistry: S. Stritch, S Ram Rao, D. Campbell. Passed in Physics: S. Stritch, S. Ram Rao, D. Campbell. Passed in Biology: S. Stritch, S. Ram Rao, D. Campbell. Completed Examination: S. Stritch, S. Ram Rao, D. Campbell.

Intermediate Professional Examination.—Passed in Anatomy: D. Campbell, S. Ram Rao, U. A. Kynvett-Hoff, C. Duckworth. Passed in Physiology and Histology: M. Burke-Kennedy, S. Ram Rao, D. Campbell, U. A. Kynvett-Hoff. Passed in Materia Medica: S. Ram Rao, D. Campbell, U. A. Kynvett-Hoff, C. Duckworth. Completed Examination: S. Ram Rao, U. A. Kynvett-Hoff, D Campbell.

Final Examination.—Passed in Medicine: D. Campbell. J. A. M'Conochie. Passed in Midwifery and Gynæcology: D. Campbell, P. O'C. White, J. A. M'Conochie, S. Ram Rao. Passed in Surgery (including Ophthalmic Surgery): C. D. Downing, M. Keogh, J. A. M'Conochie. Passed in Medical Jurisprudence and Hygiene: S. Ram Rao, D. Campbell. Passed in Pharmacy: J. A. M'Conochie, S. Ram Rao, D. Campbell, U. A. Kynvett-Hoff. Completed Examination: C. D. Downing, J. A. M'Conochie, M. Keogh.

Medical Appointments.

The following appointments of Medical Officers of the General Post Office, Dublin, have been made as from July 1st:—Central District, Dr. William Ireland de C. Wheeler; Rathmines and Pembroke, Dr. Warren; James's Street, Dr. Magennis; Clontarf, Dr. O'Connell Redmond; Phibsborough, Dr. Ryan.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Dr. R. E. F.—Legal Notice of Defence having been tendered, you will probably hear no more of the matter. The attempt to obtain compensation by threat was too obviously evident.

LOCUM TENENS.

Dr. A. G. Bateman, General Secretary, Medical Defence Union, 4, Trafalgar Square, W.C., writes us as follows:—"May I once again ask your readers—especially those in the Eastern Counties—who may receive an application from either 'Dr.' George Covey or 'Dr.' Richard Nunn for appointment of 'locum tenens,' to communicate with me before entering into any contract or placing their practices in the hands of those individuals; or, if they have already engaged such, to let me know at once."

Dr. W. A. S. (Essex).—It is not difficult to appreciate the fact that chlorine and calcium are necessary for the daily regeneration of the tissues of the body, but to take these ingredients in the form of egg-shells, which has been recently suggested by certain German savants, would not commend itself to the average Britisher.

HEALTH LEAFLETS.

The National League for Physical Education and Improvement has recently added four new health leaflets to its well-known series, which has already met with so much appreciation both by Public Health Authorities and by the ever-increasing number of voluntary health workers. One deals with cleanliness in the home, another with fresh air and ventilation, while the other two contain instructions on bringing up breast-fed and bottle-fed infants respectively. All four are couched in simple and forcible language. Specimen copies will be sent on application to the Secretary of the League, 4, Tavistock Square, W.C., if a stamp is enclosed for postage.

L.R.C.P., M.R.C.S.—It would be against our rule to take sides in the dispute referred to. The point could, we think, be easily arranged if both were willing, without resort to publicity or law, and we should be pleased to act as Arbitrator if requested by both parties.

Appointments.

Daw, S. W., M.B., B.S.Lond., F.R.C.S.Eng., Surgical Tutor to Leeds University and Surgical Registrar to the Leeds General Infirmary

Dixon, Godfrey Brookes, M.R.C.S., L.R.C.P.Lond., L.S.A., Principal Sanatorium and Tuberculosis Officer to the City of Birmingham.

Donaldson, Robert, M.B., Ch.B.Edin., F.R.C.S.Edin., D.P.H., Pathologist and Bacteriologist to the Royal Berkshire Hospital

Johnston, H., M., Ch.B.Aberd., Certifying Surgeon under the Factory and Workshop Acts for the Newtyle District of the county of Forfar.

Leverton-Spry, Edward, L.R.C.P.Lond., M.R.C.S., Medical Officer for the St. Keverne District by the Helston (Cornwall) Board of Guardians.

Macphail, Alexander, M.B., C.M.Glasg., Lecturer on Anatomy to St. Bartholomew's Hospital.

Vacancies.

Armagh County Council.—Tuberculosis Prevention (Ireland) Act.—Medical Superintendent. Salary £400 per annum, with £100 per annum for travelling expenses. Immediate application to Joseph Atkinson, Secretary to the County Council. (See advert.)

County of Devon.—Assistant School Medical Officer. Salary £250 per annum, with allowance for expenses. Applications to the Secretary, County Education Office, Exeter.

Salop Infirmary, Shrewsbury.—House Surgeon. Salary £150 per annum, with board, washing, and residence. Applications to Joseph Jenks, Secretary.

Blackburn Union.—Resident Medical Officer.—Salary £150 per annum, with apartments, rations, washing, and attendance. Applications to Chas. E. Bygrave, Union Clerk, Union Offices, Cardwell Place, Blackburn.

York County Hospital.—House Physician. Salary £100 per annum, with board, residence, etc. Applications to Fredk. Neden, Secretary and Manager.

Kent County Asylum, Maidstone.—Fourth Assistant Medical Officer. Salary £175 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk, and washing. Applications to Medical Superintendent, Asylum, Maidstone.

County and City Asylum, Powick, Worcester.—Junior Assistant Medical Officer. Salary £160 per annum, with board, furnished apartments, washing, and attendance. Applications to Medical Superintendent.

Portsmouth Borough Asylum.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

Perth District Asylum, Murthly.—Assistant Physician. Salary £120 per annum, with board, laundry, and attendance. Applications to Dr. Bruce, Murthly.

Royal Lancaster Infirmary.—House Surgeon. Salary £100 a year, with residence, board, attendance, and washing. Applications to Neville Holden, Hon. Secretary.

North Devon Infirmary, Barnstaple.—House Surgeon. Salary £100 per annum, with board, residence, and washing. Applications to Chairman, House Committee.

Births.

Mollison.—On Aug. 7th, at 26, Nevern Mansions, S.W., the wife of W. M. Mollison, M.C., F.R.C.S., of a daughter.

Ta Bois.—On Aug. 9th, at Clare Hall, South Mimms, Barnet, the wife of A. C. Ta Bois, M.D., of a daughter.

Trist.—On Aug. 7th, at St. Columb, Cornwall, the wife of J. R. R. Trist, M.R.C.S., of a son.

Marriages.

Cane—English.—On Aug. 8th, at Holy Trinity Church, Orton Longueville, Leonard Buckell Cane, M.D., of the Minster Precincts, Peterborough, eldest son of the late Leonard Cane, M.D., to Margaret, eldest daughter of Marcus V. English, of Orton Longueville, Peterborough.

Gray—Mummery.—On Aug. 5th, at the Church of Saint Michael and All Angels, Bedford Park, W., Robert Walker Gray, M.B., C.M., D.P.H., Medical Officer Southern Nigeria, to Hilda Mummery, daughter of the late A. F. Mummery and Mrs. Mummery, of 105, Esmond Road, Bedford Park, W.

Hunter—Beale.—On Aug. 9th, at the Parish Church, Stone, Kent, Percy Douglas Hunter, M.R.C.S., L.R.C.P., third son of Walter Hunter, Esq., of 2, Chartfield Avenue, Putney Hill, S.W., to Kate Bell, daughter of Charles Beale, Esq., of 12, Farleigh Road, N.

Deaths.

Faraday Giles.—On Aug 11th, 1912, at Hemel Hempstead, Dorothy Mary, eldest daughter of Bernard Faraday Giles, M.D., aged 25.

Gibbes.—On July 19th, at McAlester, Oklahoma, U.S.A., Heneage Gibbes, M.D., son of the late Rev. Heneage Gibbes, of Bradstone, Devon, and grandson of the late Sir George Smith Gibbes, F.R.C.P., Physician to Queen Charlotte, aged 73. (By cable.)

Jacob.—On Aug. 16th, at the residence of her daughter, Inverness, Florence Jacob, widow of Dr. Archibald H. Jacob, M.D., F.R.C.S., I. of Dublin, aged 71.

Meredith.—On Aug. 11th, at St. Leonards, John Edward Meredith, M.D., of Maidstone, after a long illness. Friends will kindly accept this, the only intimation.

Rand.—On Aug. 7th, John Rand, F.R.C.S., of Felixstowe, Lovelace Road, Surbiton, aged 76.

Rogers.—On the 7th inst., at Eastbank, Eltham, Thomas Lawes Rogers, M.R.C.P., in his 84th year.

Sequeira.—On Aug. 9th, at a Nursing Home, James Scott Sequeira, M.R.C.S., of South Hackney, aged 84.

Taylor.—On Aug. 12th, at Kingston Hill, Elizabeth Ann, widow of Alfred A. Taylor, aged 82.

Veale.—On Aug. 4th,, at 18, Weighton Road, Anerley, Rachel Sandys, the beloved wife of Brigade-Surgeon T. S. Veale, M..D, aged 77.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, AUGUST 21, 1912. No. 8.

NOTES AND COMMENTS.

Dispensing with Doctors.

AMONG the many schemes, good, bad, and indifferent, which have been put forward as the alternatives of medical benefit under the National Insurance Act, is one which, under ordinary circumstances, would be beneath our notice, but to which we may now briefly allude, as illustrating a common tendency of the present age. A certain individual, eager for notoriety, has been struck with the brilliant idea that people should do without medical men altogether, save, perhaps, in surgical emergencies, and he has, accordingly, published this illuminating suggestion in several of the northern daily papers. The "unnecessary luxury," as he calls it, of medical men may, he states, easily be dispensed with by a little more attention to food and drink and by obedience to the laws of nature. He goes on to say that many great social and sanitary reforms "owe their progress not to the physician but to the laity." Without discussing the accuracy of this latter statement it may be remarked that a sort of fascination for dabbling in physic has always existed amongst a certain class of the public, especially in those whose good intentions outweigh their intellectual faculties. Self-doctoring, self-prescribing, and self-drugging are largely upon the increase in this country, hence the success of the patent medicine traffic, but he would be a bold man indeed who would venture to assert that the death-rate is diminishing in consequence. Fortunately for the public health, there is not the slightest possibility of this grotesque alternative to the medical benefit being treated otherwise than with the silent contempt that it deserves.

Death after Vaccination; Post or Propter?

To show what lengths the opponents of vaccination will go in their endeavour to attribute all sorts of different fatalities to the performance of this slight operation, the case reported in the *Star* of August 8th may be quoted. The patient was a well-developed youth of fifteen, who had passed a Civil Service examination for the position of boy copyist. He was certified as being medically fit, with the exception that he was advised to have his teeth seen to and also to get vaccinated. The lad's father, in writing the account of his son's case, states that the vaccination was duly performed on July 5th, the usual certificate being given a week later. Meanwhile the boy had complained of headache, seemed drowsy, and there was said to be a swelling near the armpit. On the 18th he walked into a doctor's surgery and there fainted. The next day he became unconscious and was removed to the London Hospital, where he died on the 22nd without recovering consciousness. We have not the official medical details of the case before us, but the account of the autopsy, as given in the *Star*, leaves little doubt that the unfortunate lad succumbed to heat-stroke, the fatal issue being said to have been due to cerebral hæmorrhage, while the blood-vessels were enormously congested and distended. It will be remembered that the period of his illness coincided with the heat-wave with which the metropolis was then visited. It is not stated whether any special precautions were given or carried out after the vaccination, but it is manifestly unfair to assume that death occurring seventeen days afterwards was necessarily due to the operation itself, in view of the *post-mortem* findings. But it is useless to argue with some people, and we suppose that the case of this boy, with whose parents we deeply sympathise, will be used by the anti-vaccinators as yet another instance of the terrible dangers attendant upon this simple inoculation.

Turkish Baths and the Shops Act.

THE coming into force of the Shop Assistants Act, whereby, amongst other things, a compulsory half-holiday is given twice weekly to all employees, has been attended with various difficulties in administration. Thus, a grocer having a wine and spirit licence may open his shop on the half-holiday to sell wines and spirits, but he may not sell groceries to his customers at such times. In some occupations the unfortunate assistant is in mid-air, so to speak, for he neither comes under the Act nor its exemptions. An instance of this kind is the Turkish Bath attendant, who has, so far, not been brought within the Act, inasmuch as there is no actual selling of goods. If the matter were put to proof, it is possible that the sale of refreshments which takes place in these establishments might bring them into the Act. For the present, however, the Turkish Bath employee derives no benefit from what is in principle a commendable piece of legislation. There is no apparent reason why a man thus employed should not share in the advantages society has decided henceforth to bestow upon those who do the hard work of the world. Other persons in the same social class are included in the Act, and when the attention of the London County Council and of other authorities concerned is directed to the point there should be no great difficulty in extending the Act so as to include a highly-deserving set of men.

The Turkish Bath.

TURKISH bath employees constitute a large number of men and women in the aggregate. They are able to earn good wages, and their occupation is healthy. At the same time, however, it involves extremely long hours of work, and there is little time for the domestic and other amenities of ordinary life. The popularity of this form of bath has gone on steadily increasing for many years past, and at no previous period has the public been provided with more sumptuous and convenient baths, or with a better trained service of attendants. The value of the Turkish bath from a medical point of view is pretty universally admitted. To the town-dweller it offers a substitute for the active physical exercise that is rendered impossible to him by the conditions of his environment. To the mildly rheumatic patient it spells comfort and safety, while to the gouty it is the one rational form of prevention open to him at all times and seasons. The Turkish bath, as a matter of fact, is good for all, except at the extremes of life, and when serious heart or other organic mischief is present. The chief drawback to the busy man is the time that is required, but we know several men of affairs who take their Turkish bath with clockwork regularity; some of them, indeed, save time by taking a meal whilst in the cooling-room, where they can also write letters and send telephone messages. It seems unlikely that anyone will be able to invent a quicker form of Turkish bath.

Common-Sense Philanthropy.

The death of Miss Octavia Hill has removed from our midst one of those practical philanthropists who are essentially the product of the British character. Although her ideals were high, she made no attempt to achieve impossibilities in social reorganisation, but, taking things as she found them, worked steadily at the bettering of existing means and conditions. Her name will always be associated with the great modern movement which has had for its aim and end the elevation of the slums. One of her main principles was to insist upon the need of soap and water, the use of the scrubbing brush, the necessity of fresh air, and other commonplaces of domestic hygiene. Such matters are apt to be overworked by the theorist, who seeks an explanation of the drawbacks of slum life in an unequal distribution of wealth, or in the innate depravity of the slum landlord, with the necessary conclusion that the only effectual remedy is to be found in legislation. While no one can deny that there is plenty of room for reform in both of the above-named directions, we have in Miss Hill's lifework an object-lesson of the value of methods which appeal to the slum-dweller as a vital and indispensable part of the social problem of which he forms so disquieting a section. Place him in never so fine and perfect a model dwelling, he will quickly convert it into a den of filth and unwholesomeness, unless he carries out in practice the ordinary rules of domestic order and cleanliness.

The Slums of To-day.

The fashion of "Slumming" has not altogether died out among the well-to-do classes of society. To their credit be it said, that many good men and women go amongst the slum-dwellers with the message of hope and the gospel of wholesome living. Legislation has done much in the way of providing education, of enforcing good standards of public health, of limiting the hours of labour, of safeguarding the health of the worker, of securing him compensation for injury, and, lastly, of providing against the risks of unemployment and the disabilities of old age. Then, again, the local public health administration has immensely improved of late years, although much more remains to be done, in such directions, for instance, as the security of tenure of office by the medical officer of health. It may fairly be said that much of this improvement has had its ultimate origin in the work of those who first paid attention to the practical needs of the slum dwellers. Among that noble band of philanthropists the name of Octavia Hill deserves to be recorded as one of the women who subordinated mere sentiment to the dictates of practical common sense, a proceeding which in the long run is the only one likely to produce results of enduring value.

Training for Tuberculosis Officers.

Now that the public have begun to realise that tuberculosis, if it is to be finally stamped out, must be fought by the active co-operation of the masses with the medical profession, it is interesting, and not a little amusing, to hear the views of the sundry self-constituted authorities upon the question. One writer to the papers, hailing from the aristocratic quarter of Grosvenor Square, is convinced that consumption may be cured by attention to the proper method of respiration, and boldly asserts that "not a single medical school pays the slightest attention to the study and practice of breathing," which he thinks is a grave scandal! The value of full and deep breathing as a means of securing a better aeration of the blood is fully recognised by medical men, but no one would seriously maintain that consumption may be "cured" by breathing exercises alone, except an extreme physiculturist. What is more urgently needed at the present moment is, as Sir William Osler has recently pointed out, some form of special training for tuberculosis officers, for which class of practitioner there is likely to be a brisk demand in the near future. A three-months' course of instruction in the diagnosis of early phthisis, the methods of work in a tuberculosis dispensary, the *technique* of the administration of tuberculin, etc., would provide a good scheme of instruction for those desirous of taking up this work. Even if differences of opinion do exist as to the relative advantages of sanatorium, tuberculin, and other modes of treatment, there is nothing to prevent the judicious employment of all of them in cases that are respectively suitable for each.

LEADING ARTICLES.

THE FRENCH POPULATION QUESTION.

The custom of narrowly restricting the number of children in the family has prevailed for many years virtually among every class of the French people, even the peasantry of some Departments, who formerly displayed normal fecundity, having adopted the fashion of limiting their offspring to two or three. Among the mass of the people the family now practically never numbers more than three, and it is among the true *elite*, the physiologically best bred, that the numbers are smallest. The effects of this custom from the eugenic point of view, have not yet been enquired into. A gigantic system of artificial selection has, however, been carried on for at least a hundred years, but whether this has tended to produce a superior or inferior stock remains to be proved. If it is the rule that the first born are the best of the human brood, then evidently so far all may be well; but if as a rule the best samples, physically and mentally, are to be found among the later born, and if with less interference with natural selection these would provide the seed of the race, it seems clear that deterioration must have gone on. No writer of authority doubts that the births are regulated by the voluntary acts of parents. Many parents agree to have no children; the majority decline to produce and rear more than suits their own egoistic purposes. In this way, parents are no doubt saved from strenuous effort and anxiety, and whilst the girls are made sure of matrimony by an adequate *dot*, the boys are guarded from the battle of life which has been thought so good for the formation of high character. In whatever way the problem has been regarded, from the personal or from the eugenic point of view, the broad results brought about have for long been a cause of anxiety to French men of science and statesmen. The population remains stationary; in some Departments the deaths exceed the births, and the numbers—between 39,000,000 and 40,000,000—have been kept up during the past forty years only by immigration from Italy, Switzerland and Germany. France, with the most splendid climate, and the most fertile soil in Europe—a soil capable of supporting many more millions than at present subsist upon it—has not enough men for her home requirements; she has none to spare for the vast oversea territories, misnamed colonies, which she has acquired within recent years. Great areas of these territories—the highlands of Madagascar, for example—are suitable for people of European blood. In Tunis, Algeria and Morocco, French protectorates or colonies, the bulk of the white population is not French but Italian, Greek, and Levantine. In view of recent statistics, which show for last year a falling off of 32,869 in the births as compared with those of 1910, it is not perhaps surprising to learn that the French Government has now appointed a Commission for the purposes of investigating the causes of the decline, and suggesting remedies. The population of Germany in another decade will be more than double that of France, a sufficiently suggestive fact bearing on the problem of national defence. M. Bertillon, in emphasising all the facts, points out the importance of immediate action if France is to maintain her position in the world. He shows that whereas a century ago 27 per cent. of the population of the Great European Powers were French, to-day the proportion is only 11 per cent. Formerly French was the most widely-spoken language; to-day it is the mother tongue of only 45,000,000 as compared with 100,000,000 who speak German and 130,000,000 who speak English. M. Bertillon suggests an appeal to patriotism, and urges that Frenchmen must be taught to regard a child as a burden which its father supports for the benefit of the whole community. But as every intelligent Frenchman has for forty years been alive to the fact that the safety of his country depends mainly on population, and has yet refused to make the sacrifices called for in rearing, on an average, more than two children, the efficacy of this appeal must remain doubtful. It is urged that the family should consist of at least three children—two to fill the places of the parents when they die, the third to fill the gaps caused by those who die before attaining adult age. In order to promote this end it is proposed to arrange a reduction of taxation upon fathers of three or more children, in proportion to the number of living offspring. It is further suggested that the laws of succession should be modified and formalities of marriage simplified; that mothers of large families should be assisted in various ways; that especial provision should be made for widows left with children; and that among public servants candidates for employment by the State who have children should be considered as eligible in proportion to the size of their families. The result of the enquiry by the new Commission cannot be without importance to the people of these islands, seeing that our present falling birth-rate, if continued, will bring us within a very few years into a position exactly similar to that of our neighbours.

ALCOHOL AND TOBACCO.

Of all revolutions in our social and domestic habits, that which has decreed the rational as against the excessive or irrational use of alcohol is perhaps the most far-reaching. In some form or other mankind has always craved for the narcotic poisons which Nature, curiously enough, has often placed, so to speak, ready at his elbow. The Mohammedans, who eschew alcohol, substitute, on the other hand, opium, coffee and tobacco, which they consume in enormous quantities. The very existence of the "drug habit," in point of fact, marks the survival in an individual of faulty control of the deeply placed instinct which leads man to turn to narcotics. Of late years a great change has undoubtedly come over the drinking habits of the nation. Nowadays it is considered disgraceful for a man to be seen under the influence of alcohol, and the domestic consumption of wine and spirits has enormously decreased. At clubs or hotels or public dinners it is now a common experience for those at luncheon or dinner to drink nothing stronger than water. The drink bill of the nation is therefore steadily diminishing, although there is still room for a great deal of improvement, especially among the working classes. The life of the average labourer is one of toil and of hard living on scant means, so that it is only natural he should seek some alleviation in alcohol. A newspaper discussion has been taking place lately upon this point. It has been estimated by

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a country clergyman that the average labourer pays in indirect taxation £5 2s. 11d. per annum, and of that sum £3 14s. 8d. is contributed to the Exchequer on account of beer and tobacco. On the basis of these figures a brother clergyman exhorts the labourer, "for his health's sake, his pocket's sake, and his children's sake, to abstain from the poisonous luxuries—alcohol and tobacco." While agreeing with the general tenour of this advice, we cannot help reflecting on the differences of lot in him who gives and him who takes that wholesome exhortation. Take, for instance, the proportionate time spent in labour, rest and recreation, the social and intellectual resources of relaxation, the proportionate income, and so on. If alcohol be needed by either man, there can be little doubt as to which brain and body needs physiological stimulation, or even at times the higher degrees of narcosis. An analysis of the position, in fact, brings us round to the desirability of improving in every way the opportunities of the labouring classes so that they may be assured of the chance of decent competency. The temperance worker is apt to be somewhat narrow in his outlook, and to seek in repressive legislation a remedy for all the social evils he sees around him, due to excessive drinking. As a matter of fact, he might accomplish much by establishing statutory standards of purity and strength in alcoholic beverages. Much of the damage to health is undoubtedly due to the sale of beer and spirits containing crude and harmful impurities. Various absurd restrictions in favour of the drink trade should be abolished forthwith. A license, for instance, should be granted to all restaurants or eating houses where customers could obtain ale or wine with their meals. Then there is the futile restriction which prevents persons holding an off-license from selling less than certain quantities of alcoholic beverage. For instance, such a person cannot sell less than three dozen of bottled ale. It may, of course, be argued that the sale of single bottles would be greatly multiplied if the sale were unrestricted, but, on the other hand, it is absurd to assume that a man would be more likely to be temperate if saddled with three dozen bottles of beer instead of, say, half a dozen. Then, again, the grocer is prevented from selling half bottles of spirits, although that right is granted to the licensed victualler. Many persons who now buy, perforce, a whole bottle of spirits, would prefer to purchase a half bottle. It would be well if some philosophical friends of the temperance question could arrange to have these matters brought forward in Parliament. It is unlikely that the consumption of alcohol as a national habit will cease for many generations, and the best results will be secured only by the adoption of fair and reasonable principles of control. The attitude of the reformer who speaks of the poor man's beer and tobacco as "poisonous luxuries" is hardly likely to secure the sympathetic reception which his propaganda undoubtedly merit. As to tobacco, there are no signs of a decreasing consumption, nor can any such consummation be anticipated while mankind is constituted upon its present basis. All the narcotic poisons in ordinary daily use—caffeine, theobromine, nicotine, alcohol—are harmless in small quantities and fatal in large. As regards the consumer, if he is not sure of his powers of control, he had better abstain altogether. Otherwise, each one has its appropriate place in the scheme of human life. The whole question, from a philosophical point of view, narrows itself down, more or less, to that of the well-worn adage which warns us against the good servant that makes a bad master.

CURRENT TOPICS.

The Notification of Acute Poliomyelitis.

An Order was issued last week by the Local Government Board under Section 130 of the Public Health Act, 1875, rendering general in England and Wales the notification of acute poliomyelitis and cerebro-spinal fever. In a circular accompanying the Order it is recalled that on December 12 last the Board suggested to local authorities the desirability of notification, and in response to that suggestion many authorities have taken steps under the Infectious Disease (Notification) Act, 1889, to make these diseases notifiable, but this action has not been taken universally. The Board, having been advised that more general action is now desirable, have issued the Order referred to above, so that all cases of these diseases may at once be brought to the notice of the public health authorities. A special form of certificate for cases of acute poliomyelitis and cerebro-spinal fever has not been prescribed, but the age and sex of the patient and the date of the onset of the disease are to be given, in addition to the information required in the certificate prescribed for the purposes of the Act of 1889. In districts in which these two diseases are already notifiable under the Act of 1889 the medical practitioner will notify under that Act and not under the Regulations. He will, however, be required under the Regulations to give the additional information referred to. The Board request local authorities to send them from time to time full particulars of cases notified and of the arrangements made for the examination of cerebro-spinal fluid and other pathological material, and for the treatment of patients. The Order will come into force on September 1 next and should prove of material assistance in dealing with these two diseases.

Colour Blindness at Sea.

THE practical importance of the ability to recognise coloured lights for naval officers and seamen is universally recognised. It is interesting, therefore, to note that in a Blue Book issued last week containing the minutes of evidence taken before the Departmental Committee on Sight Tests, Dr. W. H. R. Rivers suggests that a colour-blind person may possibly, owing to his development of powers other than colour sight, be able to recognise the three lights used at sea sooner than a normal person. He is enabled to make use of other criteria, such as differences of hue, of luminosity, and of saturation. A red and green light, which are wholly different to the normal eye, may also be wholly different, on acount of their difference in luminosity and saturation, to a person who confuses red and green, and of these saturation is especially important. Taking the lights used at sea as examples, the white light is generally yellowish, and the red light also yellowish, and therefore these two lights will appear in the same hue to the red-green blind person, but they differ wholly in saturation. While the colour in which the red light appears has a very high degree of saturation, the white light will obviously have a very low degree of saturation, and it is probably as a result of this difference of saturation that the colour-blind person never confuses these two lights. The recognition of the green light is a more difficult matter for the colour-blind, partly on account of the greater variability in the hue of the green lights used at sea. The colour-blind can often distinguish differences of luminosity and saturation more delicately than the person with normal colour vision. This increase, it is suggested, may be so considerable that colour-blind persons may actually be able to see colours which are so faint as to be totally invisible to the normal eye. The international standardisation of the lights used at sea is advocated, and it may be noted that the choice of a blue-green light of constant hue for the standard green light has already been taken by Great Britain and Germany, and possibly by many other nations.

The Tuberculosis Campaign.

Supported by a closely-reasoned statement, Sir William Osler publishes an appeal for organisation in the campaign against tuberculosis. He suggests the formation of a general staff, which shall control the Government funds, direct the campaign, plan the education of doctors, nurses, and the public, organise research, and act as co-ordinating centres for the manifold activities engaged in the work. He advocates a comprehensive scheme on lines suggested by the Astor Committee, co-ordinating the various agencies. At the head he would place the Local Government Board, which he describes as an effective working machine, directed by "a man both sympathetic and intelligently enthusiastic in all that relates to tuberculosis." He urges that the energies for research work should be concentrated in one large laboratory. Sir W. Osler believes that the fighting line will centre about the dispensaries. He points out that at present no provision exists for the training of their officers, and shows how easily this could be arranged for in existing institutions. He strongly urges the linking of tuberculosis work with existing hospitals and dispensaries, and for the following reasons: Many patients apply who are not tuberculous and can be turned over promptly to the proper departments. Many cases of bone, gland, and other forms of local tuberculosis need surgical advice and treatment, which they can receive while attending the special dispensary. Patients applying in other departments and found to be tuberculous can be transferred at once. Doubtful cases, patients with abdominal, gland, and bone disease, early forms of pulmonary tuberculosis, may be admitted to the wards at once for observation. For the sake of the public the members of the staffs of general hospitals should not be deprived of the opportunity of seeing so important a disease as tuberculosis.

Venereal Prophylaxis.

The prophylaxis of venereal diseases to be efficient must include social and individual preventive measures. Two important papers have recently appeared on this subject, one, by Howard A. Kelly, M.D., of Baltimore, which appeared in the last issue of the Medical Press and Circular, deals with a social method of prevention; and the other, by Dr. Bachmann, of the United States Navy, considers the individual side of the question (*Medical Record*, August 3rd, 1912). Dr. Kelly passes under review the various attempts to segregate prostitutes in Brussels, Berlin, Norway, Sweden, Italy, Denmark and Japan, and points out that the chief authorities in these countries are convinced that segregation has nothing but a baleful effect upon public morality and advocate that the system be discontinued. Moreover, the regulation of prostitution by the State and the medical examination of prostitutes have absolutely no effect, except a pernicious one, on the prevention of venereal diseases. Dr. Kelly holds that the only method of dealing with prostitution is by extermination. As an ideal condition cannot come in a day, to cope with venereal disease we must turn our attention in the meantime to individual preventive measures. If the medical profession would only realise the importance of Metchnikoff's discovery that a 30 per cent. calomel ointment relatively protects against syphilis, if they taught the public so, and if such individual prophylactic measures as are used in the Navy in regard to gonorrhœa were instituted, these diseases would claim fewer victims every year amongst laymen as amongst the men in the Navy. The only person an individual has any control over is himself, and if doctors would teach prophylaxis to individuals, they would gradually decrease the number of victims to venereal disease, whilst they and others use every effort to abolish or limit the great social evil of prostitution. The latter should be done, and the former not left undone.

PERSONAL.

Dr. C. Wilfred Vining, M.D., B.S., M.R.C.P.Lond., D.P.H., has been appointed Assistant Physician to the Leeds General Infirmary.

Mr. Donald Duff, F.R.C.S.Edin., F.R.F.P.S. Glasg., has been appointed Assistant Surgeon to the Glasgow Royal Infirmary.

Dr. H. O. West, of Queen Mary's Hospital for Children, Carshalton, has been appointed Tuberculosis Officer by the Kent Insurance Committee.

Mr. Edward D. Davis, F.R.C.S., has been appointed to the recently created post of Assistant Surgeon to the Throat, Ear and Nose Department at Charing Cross Hospital.

Sir William Turner, K.C.B., Principal of Edinburgh University, has been created a Knight of the Prussian Order of Merit, in recognition of his eminent services to medical science.

Dr. J. C. M'Walter, of Dublin, has been elected Deputy-Governor of the Apothecaries Hall of Ireland, and a member of the Court of Directors of the same Corporation for the ensuing year.

Sir Thomas Crosby, M.D., Lord Mayor of London, has been appointed Hon. Colonel of the 1st London Brigade, R.F.A., during his year of office, and has received His Majesty's Commission in that capacity.

We are asked by the *Deutsches Zentral Komitee für Ärztliche Studienreisen*, to announce that an educational tour for medical men will start from Hamburg on September 7 for the United States and Canada. Lectures will be delivered on board the ship, so that pleasure and educational advantages are united. About 250 German doctors are expected to take part in the tour, and English practitioners desirous of joining should address the Committee, 134B, Potsdamerstrasse, Berlin.

FRENCH CLINICAL LECTURE

ON

THE TREATMENT OF BILIARY VESICULAR COLIC.

By DR. PIERRE LEREBOULLET,

Medicin des Hopitaux de Paris.

[SPECIALLY REPORTED FOR THIS JOURNAL.]

IT would seem that, till recent years, the treatment of biliary lithiasis was wholly directed to the expulsion of calculi from the gall-bladder. If such treatment be justifiable when these are capable of passing into the intestine, it is ineffective, and even dangerous, when the calculi cannot enter the cystic or the choledic duct, or risk obstruction of the same. But there are many cases in which these conditions are realised. (*a*) Besides the classical hepatic colic, with its well-known syndrome of paroxysmal pain, followed by slight jaundice—due to temporary obstruction of the common choledic duct, and in which examination of the evacuations suffices to prove the passage of the calculus into the intestine—there is another type, the *vesicular colic*; and in this the pain is not the expression of the migration, but of the presence of the calculus in the gall-bladder. This form, to which Professor Gilbert has specially drawn the attention of physicians in recent years, is even more frequent than the classical hepatic colic. The more we see of patients affected with biliary lithiasis, the more highly we appreciate the practical interest of knowing this fact well. For we would otherwise oftener suffer from the illusion of seeking to confirm the migration of calculi after vesicular colic than succeed in pursuing the same after the classical hepatic colic. On the contrary, we should endeavour to secure the tolerance of the gall-bladder. By so doing, we are merely following the route indicated by nature, since it is in this way that patients affected by biliary lithiasis are usually cured. And Professor Gilbert—who, since 1898, in conjunction with L. Fournier, has brought into prominence the clinical characteristics of vesicular colic—has repeatedly insisted on the therapeutic means which should be employed in order to realise this toleration of the gall-bladder. These we shall now briefly recall.

CLINICAL FEATURES.

The clinical characteristics of vesicular colic lend themselves to ready recognition. The pain is usually less violent than in the true hepatic colic, less paroxysmal, and more permanent. It is usually referred to the region of the gall-bladder at the level of the cystic point, but occasionally to the epigastrium, and may radiate to the scapular region. It occurs spontaneously, but is elicited, or increased, by pressure over the situation of the gall-bladder; and is often accompanied by nausea and vomiting. On the other hand, the icterus is usually either absent or limited, except in very acute cases, to a very slight sub-icterus, which is always acholuric. There is no migration of the calculus—except in very rare cases—so that the crisis is not followed by appearance of concretions in the stools. The temperature often remains normal, or is but slightly elevated; but in some cases fever is present, with or without thermal inversion. Then, while in cases of true hepatic colic examination of the gall-bladder may reveal nothing particular, in the cases under discussion it may be distinguished on palpation, and in one of two forms: Sausage-shaped—elongated, cylindrical, and readily definable; or globular—with varying degree of increase of volume, in which case it may be mistaken for a tumour or hydatid cyst. But, in either shape, the cystic swelling constitutes a condition which gives considerable aid in the diagnosis of vesicular colic.

The characteristic syndrome of vesicular colic usually persists for a long period; and, during a lapse of weeks, or even months, tends to reappear very readily. Thus, it may constitute a condition of *mal biliare* (Gilbert); and it is when that condition has been established that various complications supervene: especially such nervous derangements as delirium, hallucinations, and even convulsions—which appear more frequently in such cases than in ordinary hepatic colic.

Vesicular colic, when repeated, may be followed, secondarily—as a result of arrest of the calculus at the entrance of the gall-bladder—by the formation of a hydro-cholecyst of variable dimensions; or, on the other hand, the inflamed gall-bladder may undergo atrophic contraction upon the contained calculi, with sclerosis—which, in turn, leads to the development of a sub-hepatic peritonitis, accompanied by permanently recurring pains of more or less vivid type. (*a*) But whether the vesicular colic leads to such an anatomical state—objectively definable—or merely becomes the source of secondary nervous phenomena, by the persistent pain which it produces, it is a condition which calls for treatment. And, in deciding the course of treatment, we should remember that it is a function of the presence of calculi, much more than of inflammation of the walls of the gall-bladder. Nevertheless, the cholecystitis has often been credited with the origin of the painful symptoms. But this inflammatory theory, notwithstanding the favour with which is has often been treated, does not seem to be based on demonstrable arguments. Unquestionably, the cholecystitis appears, after an interval of various length, subsequent to the symptomatic pains, and it is even absent in many cases in which the vesicular colic is manifest; thus everything tends to show that, as in cases of non-migratory vesical calculi, the pains are specially tenacious, and the biliary calculi provoke the syndrome of vesicular colic by their presence and mobility in the cavity of the gall-bladder.

TREATMENT.

The treatment should be inspired by this fundamental view. To endeavour to remove the calculi by purgatives and cholagogues is to proceed in a direction opposite to that of the desired result. The calculi are usually too large for the cystic duct, or, this adapts itself badly to their passage. Accordingly, such therapeutic procedures aggravate the symptoms; the calculi are likely to become lodged in

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(*a*) Le Paris Medical. July, 1912.

(*a*) It may sometimes be difficult to establish a diagnosis between the pains of vesicular lithiasis and the permanent pain connected with adhesions of the gall-bladder to the adjacent intestine. But, in the latter case the pain is not at all affected by rest or general habit, and such negative effects may aid in forming an opinion. I have thus been enabled, in a recent case, to affirm the existence of perivesicular adhesions, which was verified by operation; division of these had the effect of causing the disappearance of the pains.

the cystic or common choledic duct, and thus give rise to a chronic obstruction; in every case the benefit is nil. Doubtless, we may by an early operation remove the gall-bladder and its calculi, and thus permanently suppress the source of the malady; but this treatment should not be made a rule, and should be resorted to only when we cannot establish vesicular tolerance. Now, observation proves that medical treatment, as formulated by M. Gilbert, secures this result in most cases.

Treatment of the Paroxysm.—The medicaments are here of less importance than rest and general treatment. *Absolute rest* in bed should be arranged for as soon as the nature of the case has been recognised. The gall-bladder may be treated locally by warm, moist, emollient applications; or by local unction of salicylate of methyl, or of amyl —which seem to produce a certain analgesic effect. The application of ice to the vesicular region may alleviate the pain, especially when cholecystitis also exists.

The *diet* should consist of *skimmed milk*, taken in small quantities at frequent intervals. Thus, there may be given progressively increasing quantities—up to two and a-half or three and a-half litres in the course of twenty-four hours—with or without the addition of lime-water. If there be much nausea at first, and the patient can swallow but little, he usually accustoms himself to take a sufficient dose rapidly. The object of this *régime* is easily comprehended. In the normal state, the flow of bile into the intestine is intermittent, while the secretion is continuous; the gall-bladder is filled in the intervals between meals, and empties itself at a definite time after these. Thus we may believe that, under the influence of a nearly continuous alimentation, as recommended by Gilbert to his patients, the physical function of the gall-bladder is modified, and the flow of the bile becomes continuous as the digestive process—as a matter of fact the gall-bladder remains empty in the herbivora, who are continuously feeding. When milk is badly tolerated—which rarely happens—we may try to obtain the same result by the use of *kéfir maigre* (of skimmed milk), which is very easy to digest (Gilbert and Chassevant), or some other form of liquid aliment, taken frequently in small quantities. A form of dietary which, like the above, produces a cessation of the alternating fulness and emptiness of the gall-bladder is very beneficial, leading, on the one hand, to cessation of the inflammation and tenderness of the gall-bladder; and, on the other, to the non-displacement of the calculi.

But this *régime* may not produce its effects till after some days; and, besides, it may be difficult of adaptation on account of nausea or vomiting. We should in such cases adopt a sedative medication at the beginning of the crisis. Besides the local applications, suppositories or sedative lavements may be used. Suppositories may be prepared from the following formula:—

Thebaic extract, } āā 0.03 centigr.
Extract of belladonna, }
Cacao butter, 3 grammes,
Make into one suppository.

It is often more practicable, and takes less time, to give a *lavement* of *antipyrin* and *laudanum*. As M. Gilbert has suggested, we may give the patient packets of *analgesin*, of 50 cgrs. each, and laudanum; with instructions to use, at the beginning of each paroxysm, two or three packets of the analgesin, and from 10 to 20 drops of laudanum in a glass of warm water: to be given in form of lavement, and retained. The effect on the pain and the secondary nervous phenomena will be manifest.

When neither suppository nor lavement produces a sufficiently sedative effect, a *hypodermic injection of morphin* may be employed—remembering that the tenacity of some cases of vesicular colic may call for too frequent repetition, and make us dread morphinomania—while entertaining a corresponding dread of its use in certain neurotic and cardiac cases. But with those reservations, the use of morphin and its adjuvants is desirable in vesicular colic, and the idea of a treatment which rapidly relieves the pain forbids us to neglect this therapeutic remedy, when we can see beforehand that its employment will be limited to a few days.

As soon as the pain has ceased, or has considerably diminished, we may try to improve the diet. But it is preferable to continue the milk cure from fifteen days up to three weeks; to this we may add milk porridge, broths, thin soups, pastes in moderate quantity, cooked fruits—arranging so that the patient may have a repast four or five times a day. Then we can gradually increase the quantities—having regard to the alimentary *régime* of all hepatic cases, from which must be excluded yolk of egg and fats (especially cooked fats), on account of the readiness with which these, on account of difficulty of digestion, tend to produce new crises. This *régime* should be accompanied by the use of medicines. But, while we are ready to provoke the expulsion of calculi with the known use of many cholagogues—in the foremost rank of which we would place olive oil and biliary opotherapy—the action of drugs on vesicular colic in its declining stage is relatively limited. Above all things, we must avoid the use of too powerful cholagogues. At most we can only employ those which can, in feeble doses, modify the biliary secretion, and secure for it a more regular and easy evacuation. Of this number is *boldo*, which may prove useful in the form of tincture, in doses of 20-30 drops per diem; fluid extract of *combretum*, and other mild cholagogues may also be recommended. On the other hand, we should be cautious in the use of purgatives: sodium sulphate, calomel, etc. Biliary opotherapy would certainly in strong doses have too violent an expulsive action; but in moderate quantity, and carefully watched, it may give satisfactory results; and I have seen it help to ameliorate the state of certain victims of lithiasis when administered in the decline of the crisis, and for eight or ten days. Hepatic opotherapy may likewise be of use, especially when signs of hepatic insufficiency exist (which are frequent in the decline of the crises of hepatic colic, as MM. Gilbert and Castaigne have shown).

Finally, in association with vesicular colic often arises, as in every case of biliary lithiasis, the question of the alkaline cure. This is often too active, and, when employed too vigorously, it may exasperate the crisis, as I have seen in a number of instances. On the other hand, when used circumspectly, it may modify some cases of biliary lithiasis to good purpose. If necessary to be careful at Vichy in the use of such a water as *Gardegrilles*, the use of a less active one, such as that of Celestins, with diminished quantity of ingestion and simultaneous employment of prolonged thermal baths, seem, as Linossier has shown, to present no inconvenient results, while exercising a useful sedative action. In absence of the alkaline cure, the less irritating cure of Vittel, or the still pleasanter one of Evian may be recommended after the crises. At the same time, those various hydro-mineral cures should be carried out with great prudence, and stopped when they renew or exasperate the painful crises.

In many cases, rest and diet, with anodyne remedies, and the others which I have here indicated, suffice to cause the disappearance, more or less rapidly, of the pains and objective signs of hydro-cholecystitis. When we realise the toleration of the gall-bladder for calculi, this result should lead us to dispense with surgical treatment. But it is not less true that surgical intervention may be demanded when persistent cystalgia follows prolonged methodical treatment, or when there is a repetition of the paroxysmal crisis at brief intervals; or nervous complications occur, or on the appearance of a secondary cholecystitis. This operation usually consists of a cholecystectomy, with or without biliary drainage. It has been perfected within the past few years, and offers little risk. Accordingly, young subjects may be treated surgically, when their crises resist the medicinal methods already enumerated. Such a sequence is, however, rare; as the medical treatment is habitually followed by cure. Nevertheless, when the indications for operation appear they are more clearly defined than in cases of obstructive icterus; for in the latter we may always hope to clear out the biliary passages by energetic cholagogue medication, and are accordingly led to postpone the moment of operation; whereas in obstinate vesicular colic, even when obstruction and biliary infection are absent, the repetition of the pains may prove a formal indication for operation, when a well-directed medical line of treatment has failed in its effect, for it would be an illusive hope to try to assist the expulsion of calculi.

We thus see the practical importance of recognising and bearing in mind the fixed clinical features indicated by Professor Gilbert, the existence of vesicular colic, and the treatment which he has recommended—which takes account, not of the expulsion of the calculi, but of vesicular toleration.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by J. D. Mortimer, M.B., F.R.C.S., Anæsthetist, Royal Waterloo Hospital, Throat Hospital, (Golden Square), St. Peter's Hospital, &c., Instructor, Medical Graduates' College. Subject: "On Selecting the Anæsthetic."*

ORIGINAL PAPERS.

A NOTE ON EPIDEMIC DIARRHŒA.

By JOHN ALLAN, M.D., D.P.H.

At this time of the year the question of preventive measures in epidemic or summer diarrhœa is always to the fore. Two years ago I discussed in the *British Journal of Children's Diseases* (March and April, 1910) various ætiological factors and methods of prevention in connection with this disease, and I laid stress on the value of education. At that time I compiled a leaflet which I suggested as suitable for distribution, and the quotation of this leaflet may not at present be inopportune.

Prevention of Epidemic (Summer) Diarrhœa.

Each year during the hot weather in summer and autumn, a large number of infants are attacked by a serious disease called summer diarrhœa, and many of them die from this disease. The disease, though dangerous, can to a very large extent be prevented, and it is earnestly hoped that mothers will take precautions to save their babies' lives.

There is good reason to believe that the *common house-fly* is a very important agent in spreading the disease, and you are requested to make every effort to keep the fly out of your house. Remember that the fly feeds on, and breeds in, all sorts of decomposing filth, such as stable manure, decaying garbage, etc.; that it may carry away some of this filth on its legs and body, and may be covered with millions of death-producing germs; that if it afterwards settles on food, and especially milk, that will be contaminated, and it is very dangerous to give such polluted milk to your infants. Therefore, use fly-papers in the warm season. Keep your windows closed, and do not allow your door to stand open all day. Store the milk in clean, covered dishes in some place to which flies have not access, and do not keep your food in any room near a privy, drain, etc. *Burn* all animal and vegetable refuse, such as fish-heads, bones, tea-leaves, potato parings, etc. *Do not* throw such refuse into your backyard, or place it in uncovered ash-bins. Keep your house and outdoor premises clean, and especially do not permit dust to collect in the apartment where your food is stored. Dust in every form is dangerous to health, and for removing it wet cleansing is preferable to dry. Do not allow sinks, drains, etc., to become choked. Report at once to a public health official any nuisance, such as choked drain and any manure-heap in the neighbourhood which is attracting large numbers of flies.

Bear in mind that the fly-season is the diarrhœa season, and remember that absence of filth and dust means absence of flies.

Beware of the Fly.

Very few babies who are fed entirely from the breast die of this disease, and therefore you are strongly urged to suckle your infants at the breast. If you cannot give your child sufficient nourishment by this means, do not take it off the breast. *It is far better to feed from the breast and by bottle alternately than to feed by bottle only.*

On no account wean your infant during the hot months of July, August, and September. If your breast-milk has become scanty, continue to give your infant this as much as possible, and make good any deficiency by using cow's milk. Avoid giving condensed milk (especially the cheaper brands) and patent foods, and *never* feed your baby on *anything that is going.*

When cow's milk is employed, the milk should be boiled when it comes into the house, and kept in the coolest place. Keep the baby's bottle scrupulously clean, and reject at once any milk which smells sour. Use only boat-shaped bottles. *Never* employ bottles with long tubes, which are always dangerous. Thoroughly wash the feeding-bottle after each meal, and see that the nipple is turned inside out and well scalded.

Do not give your infant a "dummy-teat" to suck.

Never neglect any case of diarrhœa, but obtain medical advice at once. Always stop giving milk, and until the doctor arrives give nothing but boiled water or white-of-egg water.

Try to *prevent any spread of the disease.* Never leave soiled napkins, etc., lying out, but place them in boiling water or disinfectant, and always carefully cleanse your hands before preparing any food. Take the infant daily for an outing in the open air, and be careful not to overclothe the child.

Mothers, protect your infants.

THE EFFECT OF CERTAIN CARDIAC REMEDIES ON THE ARTERIAL PRESSURE.

By JAMES BURNET, M.A., M.D., M.R.C.P.Edin.

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There is no doubt whatever that a few careful observations on the effects of drugs at the bedside are of far more practical value than hundreds of laboratory experiments on healthy animals. I have always maintained that we can never fully realise the true action of any particular drug until we have observed and recorded the effects of its administration under conditions of disease.

It is impossible to estimate the number of comparatively useless drugs which are year after year foisted upon the profession as the result of laboratory experiment, coupled in some cases doubtless with a few hasty and unsubstantiated observations at the bedside. We all remember when potassium iodide was regarded as an agent which lowered the blood pressure directly. It has been shown by various observers, Stockman and myself (*a*) included, that this drug does not lower the arterial pressure at all. There is, in statements made regarding drugs, a tendency to repeat, parrot-like, views regarding their actions without any attempt at original corroboration or refutation of these. In view of this fact I determined, some six years ago, after working out the effects of iodides on blood pressure, to test the effects of certain cardiac remedies in this direction. The drugs I experimented with in this connection were digitalis, strophanthus, squills, strychnine, and caffeine. In approaching the subject I determined to dismiss from my mind the biassed opinion formed by the teaching gained from the literature of these drugs. I therefore started out with a clean sheet, as it were. For the time being I preferred to be utterly ignorant of the effects of these drugs on the arterial pressure, and set to work, therefore, as a pioneer in my investigations. In the remarks I am about to make it must be distinctly understood that, had I had access to a larger series of cases and more assistance in carrying on my observations, which had to be made single-handed, often at great sacrifices of time, I would have been able to collect a much larger amount of evidence. At the same time I feel justified in placing on record my results that others, with greater opportunities and with more clinical material, may confirm or refute my observations. In estimating the pressure I always employed Martin's modification of the Riva-Rocci sphygmomanometer, and contented myself with observing the systolic pressure only in the usual way. I made a few observations with an aneroid instrument, but had to abandon it as I found its readings varied from time to time, often to a very considerable extent.

The first remedy I investigated was digitalis. This I employed as the tincture, the effectiveness of which I previously tested in its power to reduce the pulse-rate and strengthen the heart-beat. Incidentally I may state that at first I had great difficulty in obtaining a reliable preparation, and had to discard several samples as being absolutely inert. During the past six years I have tested the effect of tincture of digitalis on the arterial pressure in twenty-five cases of disease, including such conditions as mitral incompetence, aortic incompetence, anæmia with palpitation, arterio-sclerosis, tachycardia after influenza and exophthalmic goitre. In none of these cases was there any effect whatever observed on the blood-pressure even when the drug was given in doses of fifteen minims every four hours. In some cases the blood-pressure registered 160 min. or over, but even here there was no tendency to its increase. On the contrary, in one case of chronic interstitial nephritis with marked arterio-sclerosis and emphysema the patient's condition greatly improved after the administration of tincture of digitalis in 10-minim doses three times a day for several weeks with intermissions of three or four days. Incidentally I observed that greater benefit usually resulted when the drug was given in large doses (*i.e.*, 10 to 15 minims) than when it was administered more sparingly.

I also tested the action of digitalis on a few healthy individuals, or at least healthy so far as their cardio-vascular condition was concerned, myself included. My own arterial pressure was found to vary little from 120 mins., and even when I took as much as 15 mins. of tincture digitalis every four hours it was found that the mercury column did not alter, nor did I experience any diuretic effect from the drug. This is interesting, as I am extremely susceptible to drugs, small doses usually producing effects which much larger amounts would be required to induce in other individuals.

The result of these experiments showed that even from the outset of its exhibition digitalis had no effect whatever upon the arterial pressure. The action of digitalis as a diuretic cannot, therefore, be explained as due to a rise in blood-pressure. It must, I think, be entirely attributed to improvement in the general circulation so that any venous stasis in the kidney is relieved and the arterial blood-supply to that organ is re-established. This probably explains why digitalis never produces diuresis in individuals with a normal and healthy circulatory apparatus.

In carrying out these clinical experiments it must be carefully borne in mind that statements have been made, on the strength of laboratory experiments, that when digitalis is given in large doses the output from the heart may be so much diminished as actually to produce a fall in the arterial pressure. My observations show that no fall results in any case, no matter what amount of the drug is given—*i.e.*, up to 15 mins. for a dose. The only fault, if fault it can be termed, in my observations is found in the circumstance that these were not prolonged over lengthy periods. In most cases they did not extend beyond ten days, and only in two cases was I able to keep the patient under observation for periods of six and eight weeks respectively. To my mind, however, this fact is of little consequence, as the rise in arterial pressure produced by digitalis is always said to be greatest within the first few days of its administration.

Strophanthus was another remedy with which I carried out seven sets of observations. All the cases suffered from valvular lesions. This drug is stated to raise the blood-pressure without producing much peripheral vaso-constriction. I found that a reliable tincture of strophanthus was even more difficult to obtain than of digitalis. My results with this remedy are, it must be admitted, drawn from too small a number of cases to enable any dogmatic statements to be made regarding its effects. In all cases it produces diuresis, but only in four of the cases was any rise of blood-pressure observed, and in all of these there was marked arterio-sclerosis present, so that it is not certain whether the rise is to be attributed merely to the effect of the drug, especially as in the other three cases there was no rise recorded, although the tincture was steadily pushed to the most extreme limit of toleration. I have always regarded strophanthus as a safer drug than digitalis when given in small doses, say, 5 mins. thrice daily; but I think that when given in larger amounts it involves greater

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(*a*) "Therapeutical Society's Transactions." London. 1906.

risks than is the case with digitalis which may be given in 15 mins. doses with absolute safety in many instances. It is certainly true that strophanthus is a much more powerful diuretic, even in small doses, than digitalis; and it should, therefore, always be employed when a diuretic effect is desired in cases of heart disease.

Squill, I found, in the three cases which I observed, varied very greatly in its effects. It is known that when squill is injected into the circulation in the case of animals it causes a much greater rise in arterial pressure than digitalis. My experience has been that in some cases the pressure rises slightly at one time, but remains constant at others. Of course the facts of its great rapidity of absorption and its somewhat transient effects may account for this. At all events in one of my cases I found no alteration in arterial pressure after the exhibition of 15 mins. of tincture scillæ every four hours for ten days. In another case the pressure, which was 150 mins. at the start, rose to 160 mins. at the third day, but fell again to 150 mins.; while in my third case the sphygmomanometer hardly ever gave the same record twice in succession. The patient, however, was a very nervous youth with marked mitral regurgitation, and the application of the instrument invariably excited him.

Caffeine is a drug whose effect on arterial pressure I have investigated in my own case. Three grains of the citrate produced no change. With 5 grains I observed at first a rise (?) which amounted to only 5 mins. This, however, might be almost discarded. Within a quarter of an hour the pressure, which was 120 mins. to start with, rose to 130 mins. and in half-an-hour to 135 mins. The headache from which I was suffering was definitely increased. Not until an hour and ten minutes after I had taken the drug did I find the pressure return to normal. On another occasion I took 10 grains. In ten minutes there was 15 mins. increase in the blood-pressure, and in half-an-hour 140 mins. was reached. Only in two hours afterwards did I obtain the normal reading. I experienced considerable inconvenience from copious diuresis. Caffeine is often recommended as a remedy in cases of migraine. I am confident that its use in such cases is really far from beneficial and actually aggravates the condition by raising the blood-pressure in the cerebrum.

It has been stated that strychnine is of little or no value as a direct heart stimulant. I am not prepared at present to argue for or against this statement, but I would remark that it is certainly a most valuable stimulant to the circulation in cases where the latter threatens to fail, as in pneumonia. Its effects on arterial pressure are very definite. I have carefully observed these in several cases, and have come to the conclusion that when the blood-pressure has fallen below the normal strychnine is the drug to administer. Within a very short time after its hypodermic administration a rise of as much as 40 mins. has been obtained. When given by the mouth the rise is never so rapid or so great but still it can be recorded. Nor is it necessary to administer large doses in order to produce a definite rise in the arterial pressure. This may be readily obtained by giving 5 mins. of the liquor strychnine hydrochloride by the mouth or by injecting 2 or 3 mins. hypodermically. I think the time has come when our knowledge regarding the actions of drugs must be revised in accordance with definite clinical experience. It is high time that laboratory work were more largely supplemented by observations made at the bedside by workers trained in methods of clinical research. It is obviously impossible for anyone engaged in teaching and at the same time in practice as a physician to find time to carry out these observations extensively. They demand time which can often be but ill afforded. This work, however, appeals to hospital residents and those newly qualified who could easily carry out such investigations under the direction of their superiors. My candid belief is that the more we know of the real actions of drugs the more limited will be the number of those which we employ. Certainly the effect of drugs on the arterial pressure is a question of great importance, and if my results are accurate, it is undoubtedly time that much of the older teaching on the subject should be set aside. Meantime these brief observations may serve to stimulate the interest of others who have better opportunities for carrying out what is a very important and absolutely essential research.

A NOTE ON THE PREVENTION OF CANCER.

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Medical observers are agreed that the chief predisposing causes of this disease are chronic irritation and injury. Therefore if the following rules were observed there should follow considerable diminution in the mortality from cancer, which in the Harrow district has caused more deaths than tuberculosis during the last five years.

Rules.

1. When warts, moles (especially dark-coloured) and other skin growths are exposed to constant irritation they should be immediately removed.

2. Workers who use tar or paraffin are especially liable to hard warty growths on the hands, forearms and other exposed parts of skin. Treatment should be sought early for such growths, as they may readily go on to cancer. Sweeps should take daily baths to remove the soot. Workers with X-rays should be effectually protected.

3. Avoid excesssive smoking, as it predisposes to cancer of the lips, tongue, cheeks, etc. Inhaling cigarette smoke tends to cause cancer of the vocal cords.

4. Avoid irritation of the tongue and cheek by broken, jagged teeth, and of the lips by certain kinds of inferior clay pipes, which leads to cancer.

5. Avoid excessively hot food and drink, which induces cancer of the throat. Fluids and solids should not exceed 100 degrees Fahrenheit. Many people take food and drink at 120 to 150 degrees Fahrenheit.

5a. Avoid taking large quantities of iced drinks and ices, as digestion ceases when temperature of the stomach is reduced below the normal, which is 98 degrees Fahrenheit.

6. Masticate all food thoroughly, as food imperfectly chewed causes chronic irritation of the alimentary canal, involving the gullet, the entrance and outlet of the stomach, as well as that organ itself, and various parts of the large and small bowels, especially the termination of the former.

Cancer of the food tract spreads to the liver, gall bladder, pancreas, etc.

7. Take great care of the back teeth or grinders, and see that all of them are present and in perfect order. Dentists should be employed to make good any deficiencies. Money spent on the teeth will bring a greater return than any other investment.

8. Avoid bolting imperfectly masticated food. This bad habit can be cured by not drinking during a meal. Liquids may be drunk in small quantities at the end of a meal, or in larger quantities between meals.

9. Do not delay when cancer is suspected. Early recognition and prompt removal deprive cancer of its terrors. The mutual assistance of the public and the profession is essential to early diagnosis, and a grave responsibility rests on both. Thousands of lives of women suffering from cancer of the womb, and of the breast, could be saved by early diagnosis and operation.

9a. Avoid constipation. This is to be done by judicious diet and exercise, and, should these fail, by physical and medicinal treatment.

10. Avoid the use of alcoholic drinks, as they are a predisposing cause of cancer, and diminish the average prospects of survival by 30 per cent.

11. Circumcision should be performed in early life.

THE MATERIAL OBLIGATIONS OF SPIRITUALISM AND ALLIED PHENOMENA. (*a*)

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Mr. President and Gentlemen,—In thanking you for the honour of your nomination to give the Harveian Lecture, I approach the subject with some trepidation, because I have no new laboratory facts to introduce. You are, I know, men with modern methods of precision *au bout des ongles*, whilst I am in daily contact with introspection and subjective assertion, with mere declarations which are often as emphatic as they are apt to be fallacious, and are only partly capable of that real demonstration of truth which we call experimental repetition with a determinate result. Though I am appealing to practical men, I recognise that I am at the same time addressing men of imagination, but with this difference from the ordinary mind-flights of the poet and the painter, that whilst the latter use their fancy to explain their facts, you preferably and more soundly establish a firm basis to rise from and then soar away in amazement at the wonders you have brought about. If then, like Icarus, the son of Dædalus, I fall to the ground from rashly attempting heights without the appropriate equipment, I must beg you to remember that the legend may have helped to the realisation of the modern conquest of the air by starting from below and then getting upwards. There are two kinds of students of mental science—those who start from below and are absorbed in the investigation of a very complex machine which, as yet, they have been only partially successful in unravelling, recognising that in its working or functioning there is something which they do not understand, and content to put aside as belonging to a different order; and there are those who start from above, who juggle with what they call the manifestations of mind and occupy themselves with ethereal disquisitions on imponderable essences. And the two groups of students laugh at each other, when in reality they ought to weep at the chasm which separates them and is at present insecurely bridged by unstable hypothesis only! The one sect, the Materialist, says that it is enough to know that there is a machine which acts in a certain way when it is in good order and in other ways when it is impaired, within limits which are capable of demonstration; whilst the other, the Spiritualist, says "Bother your machine! It could not make itself nor equip itself with the functions which we see. It must have been created by a Superior Agency who endowed it with the functions which it presents, and who, for His own pleasure, left in it a little of His own power, called free-will, a very delicate balancing force, to enable it to regulate and keep in subjection the many destructive tendencies which enter into its composition." As a consequence of this intermediate conflict the quacks and fanatics and irregular expositors step in—as they always do when there is no responsible authoritative body with its own charter of monopoly to stop them. Hence the army of thought-readers, of crystal-gazers, of second-sight professors, of mediums and Christian Science exponents, who have a large following of persons prompted by curiosity to explore the unknown and re-inforced by the wish to learn what is the nature of an unknown land which they hope will yield a crop of possibilities and benefits beyond all present conception.

The belief in a supreme regulating power is universal in some shape or other, whatever be the race of people or whatever the time of their existence. In the more primitive races this idea took the form of a power or a god which had to be appeased by sacrifices of blood, because what I have elsewhere called this *Hæmathymia*, this idea of blood, was associated with all that is the most potent factor in bodily life, and therefore the most precious thing which could be offered. Even in times so recent as the Old Testament we find the proposed immolation by Abraham of his son and afterwards the rules as to the sacrifice of thousands of animals to appease the wrath of the Deity. In still later days the New Testament, whilst emphasising that without shedding of blood there is no remission of sins, forbids the sacrifices of the Old Testament, and it is still the upholder of emotion as the basis of action, but whereas the earliest people trundled their cars of Juggernaut owing to the emotion of Fear, the later made another emotion, Love, their corner-stone. There was no true Science in those days—even in our present times Science is incomplete, there are many regions into which it has to advance and disperse the enveloping darkness; but it is progressive, and the question is whether it will, in its turn, become the God who has been hitherto so ignorantly worshipped. It is probably in consequence of this apprehension that the spiritual school—the Church—has up to quite recently viewed Science askance, has looked upon it as an insidious enemy seeking to undermine "truths" which must be received by Faith, thus placing Speculation on a higher level than Fact; because so far it has not been possible in every instance to demonstrate in a scientific manner all the speculations which form their Belief. There is, however, a disposition on the part of some of the more liberal and better-educated exponents of theology to recognise that there is a chain of connection between spiritual and material processes, and that there need be no heresy in acknowledging this; moreover, they see that the one has to us no meaning without the other, and therefore there is cogent reason for accepting the dictum that the one is not more wonderful than the other and that each must be subject to laws, and, as they are inter-connected, probably to the same laws. Let me in proof of this present to you a curious analogy which struck me some time ago when thinking on this inter-connection. It is with no idea of irreverence, but with the full conviction that what I am about to say points to the unity of the Divine and the human nature that I draw attention to a very striking comparison between the science of Bacteriology and the fundamental basis of the Christian religion—to use the words of the Church, the incarnation of the Spirit of God with the man Christ. Categorically stated, it amounts to this, that as a vaccine is the material or essential factor of a disease similar to that which it is intended to cure, and as it is passed through an animated being before it is used for the human subject, so the evil and the fallen nature of man (weakness, temptation, passion and emotional stress) were

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(*a*) The Harveian Lecture, read before the Harveian Society, on Thursday, March 28th, 1912.

passed through Christ, and thus used for the cure and salvation of morally diseased Humanity. Thus Christ became the anti-toxin of sin and moral infirmity. I have mentioned the analogy to several broad-thinking ecclesiastics and they have freely accepted it. Perhaps the most we can say of the theological trend of to-day is that it is in a state of velleity, one of imperfect or incomplete volition, not having made up its mind how far it can go. It seems impossible for the human mind to have a complete view of the abstract; the concrete is sure in some degree to obtrude, to thrust itself forward unsolicited. Thus we cannot think of Space without some form of delimitation attending it, of Time without a beginning or an end; and when we try to imagine Spiritualism or a spiritual body, or the so-called Astral body, or even the common ghost, we objectify it after the fashion of human resemblance. Man himself is said to be "the image of God," and therefore the supernatural in old, and even in modern theologies is represented by material images more or less distorted and moulded according to the functions they are supposed to possess. The idea of Heaven itself partakes more or less of this vicarious interpretation; according to some it is a place of gold and ivory thrones, of golden harps and instruments of music. You remember that the late R. L. Stevenson hoped it was not "an eternal tea-party with the guests ironed-out and immaculate." And I think that Charles Lamb must have embodied his idea of Hades when he wrote:

"Is it a party in a parlour,
Crammed just as they on earth are crammed?
Some sipping punch, some drinking tea,
But by their faces as you see
All silent and all damned."

When we talk of the Soul, or the Spirit, or of matter as consisting of the most infinitesimal electric Ions in a whirling motion we cannot escape presentations of a something with outlines of various kinds according to different trends of experience and education. Even Electricity and Light and Sound we think of as waves of Æther vibrating in different ways, and in our ignorance of what Life and Force are we view each as an invisible, imponderable, infinitesimal Agent—but still an Agent—whatever be the Force of which we are at the moment speaking we connect it with certain agents through which alone it is manifest to us, and this whether we speak of Magnetic, Electrical, Odic Force, or even of Life itself and Spirit—all these we presume to be different (though probably inter-related) because they have definite ways of shewing themselves. If these agents or expositions existed as mere forces we should not know nor even conceive them and, therefore, we are ready to acknowledge that there may yet be other forces, of which we have no conception because they have not yet envisaged the embodiments by which alone they can be made manifest to us. Why are people content to think without curiosity of speculation on the wind, which they cannot see? True, some nations have erected temples to the winds, but we have emancipated ourselves from any serious supplication to Æolus and Boreas and Favonius—why do they apply the forces of magnetism and electricity without bowing down in adoration to them or striving to understand their inner nature? Why do they contemplate light just as it is without concerning themselves with the awed regard of what it really is? Why, moreover, when the potentials of Soul and Spirit are spoken of, do they not treat them as they treat the equally mysterious forces of magnetism and electricity? Why, further, do they despise and repudiate the conclusions of scientists when these touch on what is held to be the particular work-ground of biblical oligarchy? Is it simply because soul and spirit investigations are entirely concerned with living matter whilst the other forces are more immediately apparent through the agency of inorganic conductive media? If so, it shows a want of appreciation of what is now known of the degree to which live matter responds to these very stimuli which are so complacently treated, while they forget that there is a considerable body of thinkers called Hylozoists who maintain that there may be a low form of consciousness in inanimate matter. The fact is that, just as electricity and magnetism, the force of gravity, and so on, appear to have their exponents chiefly in inorganic matter, so does the Soul or Spirit especially select man, animal life, as its vicarious ally; but inasmuch as Life, Soul and Spirit are supposed to be of the essence of, if not indeed identical with, the creating God, it is held to be a profane and useless pursuit to pry into the nature of these "hidden mysteries," which are only to be dealt with by a select few nominated—as in the tabernacle of old—by themselves. However the forces of electricity and light arose, they are just as wonderful as any form of spirit-life, and as they all are but different manifestations of the same thing, whatever it is, there can be no more indubitable right to examine the conditions of any one of these sources of manifestation than there is of the others. Thus fortified, I propose to take the spiritual idea as it is commonly held, even if the difficulties appear to be insurmountable, and to see what are its *obligations*, what it ought to be if the present ideas of it are in any way correct.

We will begin with the obligations of the spectre or the ghost theory: If anyone says that he has seen a ghost, he means that he has seen an image with a certain amount of solidity of shape and colour both in features and dress, either moving about and speaking, or simply gesticulating in various ways, and then disappearing. This means that a spirit, which is a replica of a former object, can assume a solidity or can condense itself so as to be capable of exciting vision, and can then re-vapourise and disappear. If a spirit can do this, it must be capable of again becoming material, and if it is able to *move* and *speak* it must be living material, however attenuated its form may be. Inasmuch as it appears at one time in one guise and at another in a different one—but all as visitations relating to the same recognised individuals—it follows that there must be a spiritual form corresponding to every phase of actual life, and that the selection of a particular presentation must be a result of deliberate choice. Now the change from one form into another means that the spiritual condition must to some amount expend itself in assuming the material shape, the two cannot exist together in the same intensity as when they were separate and dissociated, so that the necessary assumption is that when the ghost of an individual appears the spirit of the individual is replaced by it. But if the spectre is clothed, how does this happen? Clothes, we know, are things of short duration, and in most instances, as in e.g., the Hampton Court Ghost Lady, they must have been torn up or have rotted into dust and been scattered years ago! Have the clothes then a spiritual life (it would seem that the Hylozoists would say so), or does the spirit of the lady possess the power of gathering together the scattered dust of courtly confections and re-inhabiting them, or out of the millions of phases of actual life which we have already hinted as one of the necessities of the spiritual hypothesis was one so favourite a habitation that it is especially selected for actual re-habilitation, though the materials for this have long since been destroyed? Take another instance, that of the re-vivification of a skeleton which is supposed to reappear with all the accompaniments of movement, and which is stated to be a return of the spirit of the original man. If it could be proved that when the spectral bones appeared the actual skeleton was not to be found where it was known to lie, and that on the disappearance of the visitation the remains were again in *loco quo ante*, there might be ground for the belief that a temporary resurrection had occurred, but such an alternation never has been proved. The postulate then comes to this, that for a spectre to be possible there must be a dynamic change of the immaterial into the material by which the former loses its separate individuality—the two cannot exist together in the same way: if the spectre is to appear the spirit disappears, because observation of life shows us that if there is an "Anima," it is never shown except through living matter. No one has ever seen a spirit in any other dis-associated shape—what has been seen is a substance, just as, for comparison, the invisible steam in a boiler becomes the white vapour which we see after it has done its work. I am not saying there is no such thing as Spirit, but I do say that if there is it must have Laws and that it must conform to these Laws, one of which is that in manifesting itself it must lose in one direction what it takes on in another, and that as we have no knowledge of dead matter ever having been revivified and made capable of responding to spiritual influence we have no justification in saying that such an occurrence ever happens, no more than we have to say that water has ever been known to run uphill, or the force of gravity to draw a stone up to the skies, or a piece of wood to contort itself under an electric current. Spiritual energy has to do with living matter, it has no correspondence or relation with what is dead. I am, of course, aware that this statement may be traversed, especially by the evangelical school, by what is vouchsafed to us in the Gospel of St. Luke, cap. 24, on the re-appearance of Christ after his martyrdom. Whatever views may be held on this event (which we must admit to be a true narration of what was testified to by many witnesses), we do at least find in it a clue to the metamorphic continuity of spirit and matter, by the transition of one into the other and the converse. That a dead person should reappear whilst his body is as yet incompletely changed, and that it should show signs of consciousness such as utterance of warnings, signs of expression and movement, etc., is impossible. Hence stories of spectral manifestations, of spirit-rapping, of spirit-séances and messages from the dead must be impostures. *They cannot be.* This conclusion does not deny the possibility of the influence of the *combined* Soul or Spirit *and* Body of one individual upon another *during life*, even at a distance, though I have never read of nor heard any convincing proof of it. If the telepathic hypothesis is that one spirit can communicate with another, there is nothing to be said except that we know nothing about such a condition of attenuated matter. If it means that a Force or Spirit can operate on living matter and cause it to communicate with other living matter at a distance, then I say that this communication must be of a vibratory nature using what we term the Ether, but we have no experience and no knowledge that living matter can act in this way except at comparatively short distances, and then only in a mechanical way, as by loud shouting. There is no other ground for this way of explaining such a phenomenon as is said to occur. If it is supposed that one individual, by a process of hard, concentrated thinking, can reveal what is in his mind to another living person without the intervention of something in the way of a material conductor, then I say that in the first place there is not in an idea, or any set of ideas *per se*, anything of a material nature which can act upon a vibration medium, and, secondly, that if it is said that the idea (supposing it to be either abstract or material) can be carried by a spirit to another person whose nature is in harmony, then it must be assumed that the spirit is at *the command of the material*, whereas the whole of the spiritual hypothesis is that the spirit is the regulating and moving Power, and is not at the command of the material, though it may choose to work through it. In all these so-called demonstrations this power of inferior matter to *compel* the higher Spiritual Force which is said to have made it and to guide it, is surely a rock upon which the hypothesis is wrecked. "We may call spirits from the vasty deep, but will they come if we call them?" said Hotspur to Glendower. The same is seen in spirit *séances*—questions are asked of the unknown influence, and it may safely be said that no answer conveying knowledge has ever been returned as to future events. There is no future material available at the moment. Nor has anything been "revealed" as to what is going on *in the present*—nothing objective, nothing beyond what can be traced to the subjective condition of the material individual, showing that the material cannot control the spiritual, and that therefore there is no ground for believing the claims of those who allege that they can obtain answers from a spiritual world. These claims are based upon the untenable theory that a lower form of matter can control that which made it and is ruled by it. That the Spiritualist's ideas are in all respects material, that his conceptions of what is the nature (even in his so-called spiritualised state) of the spiritual world are *essentially material*, and therefore subject to the laws governing matter, is easy to prove from what they say. Their fallacy is that they assume that a spirit is non-material, and yet they describe the nature and functions of this spirit in an absolutely material way, which is very like the logical process of *petitio principii*. If they said,

Spirit is an inconceivable Thing;
We hold communication with Spirits;
Therefore we hold communication with inconceivable Things

(which is a correct syllogism in form), we should see the absurdity of their position at once, for how can one hold communication with what cannot be conceived even to exist?—the middle term is wrong; it is a *petitio principii*—these people *assume* that they are conversing with a Spirit, which, according to the first term of the premisses, is an inconceivable (and according to their own allowance an immaterial) Thing, and yet all the time they *see* it, they *feel* it, they *hear* it, and they describe it as material, and in any other way than as material they have no knowledge, no conception of it.

In a book called "Theokosmia," published by Messrs. Kegan and Trübner, there is a detailed exposition of the Spirit-world, giving professedly a full account of the gradual entry into the sixth (or most highly elaborated) Sphere, the very Heaven, of the "double" of a certain William Norman Wilson. This biography is essentially a material view of what professes to be a non-material existence. Its visions are material, its agents are material, and the lessons it teaches are nothing but a repetition of the doctrinal theology of every-day experience. It begins by a definition of the "double," which is described as "simply a portion of the soul." The body of any person who has a double (thus *implying that there are persons without souls*) does not subject the entire soul, and the double is that section of it which is free. Where dwell the thoughts and desires of that portion of the soul under subjection (*i.e.*, mixed up with the body) there the double is drawn, and helps the other part to concentrate its thoughts; all of which means that a portion of soul which is left in the body needs help to concentrate itself upon itself, but there is no indication that a free soul is any way different from a tied soul. It is difficult to see how the former can help the latter without losing energy, in which case it must after a time lose its power and therefore its nature; and if the tied soul cannot dissociate itself from the body, how is it that the freed soul, which is essentially the same as the tied soul, succeeded in freeing itself? Why, when it has lost energy by trying to help the tied soul, does it not again become chained to and held in subjection by the body? The subject of these excursions into the various spheres of spiritual refinement then gives an account of the various agents who assisted him in his flights and questionings. These agents are women, assisted by a "stranger" who employs electricity to maintain the lessening combination of soul or Spirit with body material, as the distance from one lower sphere to a higher (and a delimited one, too) is reached. So that as the Spirit progresses it clearly loses power over the body and is obliged to be helped by an *inferior* agency, a *sort of re-lay*, through another force of a nature lower in quality than itself, for it is acknowledged that "the stranger is inferior and subordinate." All this looks very material! When in our ordinary mundane existence we use a horse to draw a load up a hill, and when, after a time, the animal through expenditure of energy, becomes weaker and cannot draw the load, we employ a "stranger," a man who has brought an electrical traction engine with him, to help to overcome the laws of gravity. This spiritual explorer (specially "elected," to use his own phrase) finds his guides and conductors in three *female* beings whose appearance and methods are eminently material. and they are known to and converse with him under the not unfamiliar names of Minerva, Marian and Louisa, besides "the stranger" who is an electrical engineer—and whose special function is to keep up continuity of soul or spirit with what remains of the material body in its course towards death through gradual separation from the spiritual element (which is here called "Life")—for he explains that as he ascends higher and higher his body, which was left behind lying on the sofa, became more and more an inert bundle of flesh and clothes. The description of Minerva is that she consists of two blended parts, the Power which is evidenced by "brightness" and the figure which resembles what her body was, though now without material properties (another instance of *petitio principii*). The figures of the other spirits are more or less described in the same material way, and when our interest is wound up to the pitch of expecting the most important revelation, the result is—nothing; "questioning was not allowed to go further because the conversation was bordering upon subjects which man is forbidden to be made acquainted with." The whole story reads like a dream (which the writer owns to be a different state from spiritual conditions) and it is essentially the dream of a man strongly imbued with the teaching of accepted theologians; there is nothing in it which is not material, and the vaunted immaterial or spiritual information is nothing more than what one may hear in an every-day sermon.

(To be concluded in our next.)

PROPOSED PUBLIC DENTAL SERVICE.

By ROBERT R. RENTOUL, M.D.

When, in 1889, I proposed that doctors should establish a Public Medical Service, I also suggested that it should not only supply efficient medical, surgical and maternity treatment and medicines to those of the public making limited incomes, but also reliable dental treatment. Such proposal has not, unfortunately, been yet taken up to any extent. In 1907 a Public Dental Service was established at Brighton. The fees are paid either in cash or by instalments, and they vary from 1s. to 2s. 6d. for extractions, with 8s. 6d. for gas; fillings from 2s. 6d. to 5s. each tooth; and artificial teeth from 5s. each to an inclusive charge of 50s. Some years ago I induced a society, to which I am medical officer, to appoint a dental surgeon. He has a fixed scale of charges for extractions, anæsthetic, fillings and mechanical work. The benefit members appreciate this system. This society has also a panel of chemists, who dispense our prescriptions at a 15 per cent. to 25 per cent. deduction on the usual prices. It includes those civil servants making up to £600 a year, the yearly rates of their incomes being arranged on a graduated scale of £100, £250, £400 and £600, these each paying yearly 8s. or 10s., 15s., 20s. and 50s. for unmarried members, with 1s. to 5s. per annum for working expenses, while the married pay 15s., 20s., 30s., 40s. and 100s. per annum. There is also a graduated scale of surgical fees, the latter from 30s. to 105s. It is a great pity doctors and dentists did not adopt my proposal of some twenty years ago. But, then, many hold that doctors and dentists have not an organising or constructive sense! I would suggest that the dentists at once establish a Public Dental Service. Before the National Insurance Act was finally passed, I pointed out that although there were medical, sanatorium, sickness, maternity and disablement benefits, no provision had been made for dental benefits. But if reference be made to Part 2 of Schedule 4 it will be found that "dental treatment" may be provided for as an "additional" benefit. This being so, it is necessary that dentists should at once establish public dental service in every local area, or combined area.

Dentists often complain that a great many people go to the charitable dental hospitals for treatment. But if they will devote as much time to a constructive policy as they now do to growling, and agree to treat those with smaller incomes at fixed charges, then they would benefit themselves and the public. I find that at the dental hospital at Liverpool during 1911 no less than 33,534 patients obtained treatment, these paying £228 in contributions and £306 for fillings and plates. At this hospital, the following charges are made:—Application card 1d., crowns 7s. 6d. each, porcelain 5s. 6d., porcelain inlay 1s. 6d., gold per grain 6d., plastic 3d., universal charge 5s. The question of efficient dental treatment is of national importance. I have lately collected statistics from about two hundred school medical officers, and find that the condition of the children's teeth is deplorable, if not disgraceful. The majority seem to think that when the Creator laid it down that the young child should have twenty teeth, and the adult thirty-two, He made a very gross mistake. Many have only two, ten, or twelve teeth. Others have a mouthful of diseased teeth which resemble a malodorous cesspool. People do not seem to realise how injurious to health it must be when they inhale the bad-odours given off by decaying teeth. How unpleasant and disgusting it is to be a bystander. If one were advised by a doctor to inhale constantly, day and night, such a smell, he would be labelled "mad." Take, again, the injury to the neighbouring organs. A loss of several teeth means that the food is bolted and unchewed, with this result, that work is put upon it that no stomach can perform. If the toothless human animal could, like the birds, swallow small pebbles which help to break up the food in his stomach, good would result. Again, it may be estimated that a number of rotting teeth will form about one teaspoonful of pus, or matter, daily. This is squeezed out by and mixed up with the food, and swallowed, with the result that the patient poisons himself or herself. Some time ago a doctor who had operated upon the stomachs of seven patients found that all these died with symptoms of blood-poisoning. This puzzled him, but eventually he found that all of them had rotting teeth; that they had swallowed the pus or matter, and that this had worked into the fresh wounds in the stomach, poisoning the patients. Since then he refuses to operate on persons until all their putrefying teeth have been put right.

It is now fairly well recognised that the pus from decaying teeth is absorbed in the mouth and throat, and so may give rise to enlarged tonsils, adenoids, tuberculosis, glands in the neck, discharging ears, acne of the face, and deafness. If one could extract all the diseased teeth in a patient's jaws, and then advise the patient to put these in his or her mouth daily for twelve hours, this would really be a practical but painful education as to the very insanitary condition of the mouth. That some great national movement must take place regarding the many millions of decomposing teeth carried about by English people is the opinion of those few pioneers of thought and action now working for this end. During 1910, of 45,671 persons wishing to join the British Army, 2,601 were rejected because of "loss, or decay" of many teeth. The Chief Medical Officer of the Board of Education, in his annual report for 1910, states that from 52 to 99 per cent. of children attending elementary schools have defective teeth. These children include only those between the ages of five and 16. How many below and above those ages are defective it is not difficult to estimate. This we do know, that the average man and woman will spend their money on anything whatsoever before they will expend it upon their teeth! The last annual report of the school medical officer of Liverpool displays a most disgusting and repulsive condition of affairs. Of the school children 16.54 per cent. only had sound teeth, 45.28 had one to three decayed teeth, 36.93 per cent. four to eleven decayed teeth, 1.25 twelve or more decayed.

It is difficult to adopt practical measures to stem this particular form of national degeneracy. If the toes and fingers of the population began to ulcerate and decay, a Royal Commission would soon be appointed. Perhaps a few prosecutions of parents under Section 12 of the Children Act, 1908, would be of educational value, as under this Act parents may be heavily fined for neglecting medical aid for their children. One certain method by which dental aid can be obtained for four-fifths of our population is that which can be supplied through an efficient public dental service. Will the dentists fail in this public duty?

OPERATING THEATRES.

ST. BARTHOLOMEW'S HOSPITAL.

Abdominal Nephrectomy for Tuberculous Kidney.—Mr. C. Gordon Watson operated on a woman, aged 42, who had been admitted complaining of an abdominal swelling. On examination a large tumour was found occupying the right hypochondriac and lumbar regions. The surface was nodular, dull on percussion, and the swelling was somewhat movable on respiration. There was no hæmaturia or pyuria. An X-ray examination showed no stone. There was no rise of temperature, and no pain associated with the swelling.

Mr. Gordon Watson expressed the opinion that the swelling was renal, and probably malignant, and that it was in all probability inoperable. He proposed to explore by the abdominal route in order to make a diagnosis. If he found that the tumour was operable, he was confident that, from the size of it, it could only be removed per abdomen.

At the operation an incision was made in the right linea semilunaris, the rectus sheath was opened, and the rectus muscle retracted inwards; then the abdomen was opened, and the wound enlarged. The tumour was found to be renal, and proved to be extremely adherent to the surrounding parts. Its outer border was adherent to the abdominal wall, its inner border to the omentum, colon and stomach, and the upper pole to the liver. The ascending colon had been pushed inwards, so that there was no colon resonance in front of the tumour. The kidney was found to be elastic, and as there seemed to be some doubt as to the nature of the enlargement, it was punctured with a trocar and cannula, and some caseous material withdrawn, which, Mr. Watson pointed out, was strongly suggestive of tubercle. He then decided to attempt a nephrectomy, having first ascertained the existence of a normal-sized kidney on the other side. The hepatic flexure of the colon was densely adherent to the upper pole. During the separation of this adhesion, both the lumen of the colon was exposed and the kidney opened. These openings were closed with catgut, and the upper pole of the kidney was then separated from the liver. During this proceeding a severe venous hæmorrhage occurred, which was controlled by gauze plugs beneath the liver. Several adherent portions of the omentum were then tied off and divided. The lower pole was separated with some difficulty, being closely adherent to the lumbar muscles. The ureter was then sought for, ligatured and divided. The renal vessels could not be separately identified, but the pedicle was clamped and tied by degrees, and with considerable difficulty the kidney was eventually removed. Some attempt was made to repair the peritoneum of the posterior abdominal wall, and a counter incision was made through the loin, through which a large rubber tube was inserted. The abdominal wound was then closed, and a drainage tube inserted through the lower end. The operation lasted an hour, and the patient suffered a great deal from shock. During the latter part of the operation about a pint of saline was infused subcutaneously. The kidney proved to be tuberculous. The patient eventually made a very good recovery from the operation.

Mr. Watson stated that it was unusual to find so large a tuberculous kidney with such extensive adhesions without there being either signs or symptoms of inflammatory mischief, such as irregular temperature, pyuria, or leucocytosis. It was unusual, he said, to find tuberculous infiltration extending from the kidney into the substance of the abdominal muscles, as in this case; in fact, the clinical picture and naked-eye appearances were those of malignant disease. He pointed out that it was fortunate he had punctured the kidney after exposing the swelling, as otherwise he would not have attempted the removal of so adherent a kidney had it been malignant, nor would such a removal have been justified. One of the great dangers associated with removal of large adherent kidneys, he considered, was hæmorrhage, due to tearing of the renal vein, or even in some cases of the vena cava. This, he thought, was far more likely to occur should the attempt be made from the lumbar region rather than through the abdomen. With regard to the large area left by the removal of the kidney, he remarked that it was important to cover this over, if possible, to avoid subsequent intestinal adhesions which might result in intestinal obstruction. He had covered this area partly by peritoneal suturing, partly by making use of the omentum. Lumbar drainage was considered essential, on account of the large area from which oozing might occur.

SPECIAL REPORTS.

THE OXFORD OPHTHALMOLOGICAL CONGRESS.

The fourth annual meeting of the Oxford Ophthalmological Congress was held at Keble College, Oxford, on July 18th and 19th last, and, as usual, proved to be a very successful affair. There was a large attendance, and many of the visitors came from over-seas. Canada was represented by Dr. Hanford McKee, of Montreal. From the United States came Drs. W. B. Marple and J. A. Andrews (New York), Dr. Howard F. Hansell (Philadelphia), Dr. Miles Standish (Boston), Dr. Green (Dayton, Ohio), and Dr. W. Likley Simpson (Memphis, Te). The Continent of Europe sent Drs. H. Coppez and Van Lint (Brussels), Dr. Brandes (Antwerp), Dr. R. Leibrecht (Hamburg), and Professor Straub (Amsterdam). The programme, a full one, kept the members fully occupied during the two days of the Congress. In the Department of Human Anatomy and Physiology belonging to the University of Oxford, addresses were delivered by Professor Straub, Dr. W. B. Marple, Dr. Hanford McKee, and Drs. Thomson Henderson (Nottingham) and S. E. Whitnall (Oxford). Following the custom of the Congress, the addresses, which were of commendable brevity, were followed by no discussion. The Professional Museum, also held in the Department of Physiology, included many exhibits of interest. Pathological specimens were demonstrated by Mr. Russ Wood and Mr. Sydney Stephenson. Ingenious optical appliances were shown by Dr. Ernest Maddox, Dr. J. Burden-Cooper, Mr. H. H. B. Cunningham, and others. Dr. A. J. Ballantyne had a set of coloured drawings illustrating many diseased conditions of the fundus oculi. The exhibit by Dr. H. S. Elworthy, of Ebbw Vale, deserves a word of special mention. It dealt mainly with geological specimens concerned with mines and mining, and included samples of house and anthracite coal, tin ore, various metals, and rock. Dr. Elworthy also demonstrated the "holophane lumeter," a new instrument for measuring illumination in mines; a set of colour tests for measuring colour in mines; and an apparatus for standardising colour tests. Another exhibit of interest was by Dr. T. Llewellyn, of Bargoed, namely a series of lantern slides dealing with miners' nystagmus. The anomalous cases of miners' nystagmus, brought by Dr. T. Harrison Butler, of Leamington, attracted no little interest, especially among those members not familiar with the conditions illustrated.

The *clou* of the Museum, however, lay in the 250 coloured drawings of mammalian and reptilian eyes exhibited by the ophthalmic artist, Mr. A. W. Head. They disclosed many surprising variations of structure. An album garnished with photographs of Mr. Head at work on the eyes of the cobra di capello, the boa constrictor, the tiger cat, and many another fearsome animal attracted great attention and excited no little amusement. The Commercial Museum contained the latest things in the way of surgical instruments, optical appliances, lenses, microtomes, and so forth. The most interesting feature of this section was Gullstrand's demonstrating ophthalmoscope, whereby an image of the fundus oculi, of singularly pure quality, could be readily obtained even by an unskilled observer.

On the second day of the Congress a discussion, opened by Dr. T. Harrison Butler, on miners' nystagmus was held at the Oxford Eye Hospital. The discussion was notable on account of the number of gentlemen having a working knowledge of the subject who spoke. It was no mere arm-chair discussion. The following, among others, took part:—Dr. J. Court (Stavely), Dr. H. Tomlin, (Shirebrook), Dr. H. S. Elworthy, Mr. H. H. Folker, Dr. T. Llewellyn, Mr. S. McMurray, Dr. A. C. Norman, Mr. N. C. Ridley, Mr. J. Jameson Evans, Mr. Bernard Cridland, Mr. R. J. Coulter, and Mr. Stanley Riseley. As the outcome of the discussion, the following resolution was unanimously passed:—"That in the opinion of the Congress, the character of the illumination is the chief factor in the production of Miners' Nystagmus, and that a Departmental Committee should be appointed to make enquiries into, and to report upon, the exact conditions under which the disease occurs."

The official dinner of the Congress, presided over by the Warden of Keble College, was held on July 18th. Other social arrangements included a garden party at New College, and visits to the various colleges for which ancient Oxford is famed. The meeting must be written down as an unqualified success.

THE EIGHTIETH ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION, HELD AT LIVERPOOL, 1912.

Fifth Article.

[From Our Special Representative.]

The Annual Exhibition—Drugs, Disinfectants, etc.

The practitioner who wishes to keep up to date cannot afford to neglect a thorough inspection of the newest products of the well-known drug houses. No one could have been disappointed this year in the display of the many new remedies that were on show. At the stand of the Bayer Co., Ltd., we were shown samples of a new local anæsthetic and antiseptic, known as "Cycloform," also "Sophol," a non-irritating organic silver compound for use in ophthalmic practice. The same firm were also exhibiting two preparations of iron, "Ferro-Sajodin," and "Irocase," for use in rickets, anæmia, and scrofulous conditions. Jeyes' Sanitary Compounds Co., Ltd., displayed to advantage their familiar and indispensable "Special Fluid Cyllin," in addition to many useful preparations of this well-known disinfectant. Messrs. Parke, Davis and Co. presented a large assortment of interesting products, including "Codrenine," a new local anæsthetic and ischæmic solution containing adrenalin and cocaine; "Palol," a tonic nutrient and restorative, containing the alcohol-soluble principles of cod-liver oil, minus its fatty glycerides, malt-extract, and glycerophosphates. A complete series of bacterial vaccines and serums was also exhibited. An ideal concentrated liquid magnesia was shown by the Charles H. Phillips Chemical Co., in addition to a phosphomuriate of quinine tonic, for use in derangements of the nervous and digestive systems. At the stall of Messrs. Savory and Moore we saw "Fructole," a new chemical food, containing iron, glycerophosphates, and red bone-marrow, with a fruit flavouring, and "Aphrodont," a Dental Foam, a capital antiseptic tooth-paste, possessing valuable germicide properties. Messrs. Zimmer and Co., Ltd. (represented by Messrs. Widenmann, Broicher and Co.) were showing a large number of high-class products, including "Aponal," a safe and effective hypnotic; "Eupyrin," a mild antipyretic for children and the aged; and "Lygosin-sodium," of use in the treatment of female gonorrhœa. Messrs. A. and M. Zimmermann exhibited an immense number of interesting preparations, which included "Tebeau" (Schering), a new immunising and curative remedy for tuberculosis; "Bioferrin" (Kalle), a blood-forming organic iron preparation; a selection of the organotherapeutic products of Prof. Dr. A. von Poehl, and "Bilitin" (Ludwig Wilhelm Gauz), for gall-stones. Messrs. Armour and Co., Ltd. exhibited "Eucapren," a local hæmostatic and analgesic. The Liverpool firms were represented by Messrs. Evans, Sons, Lescher and Webb, Ltd., Messrs. Clay and Abraham, Ltd., Symes and Co., Ltd., and R. Sumner and Co. "Kerol" disinfecting fluid was being shown by Messrs. Quibell Bros., Newark, while "Izal" was in evidence at the next stand. A striking exhibit of "Antiphlogistine" was to be seen at the stall of the Denver Chemical Manufacturing Co. Messrs. Reynolds and Branson, Ltd., of Leeds, presented many interesting and useful products, including a new and valuable preparation of ergot, known as "Ergothe." The well-known "Vasogen" series of preparations was shown by Messrs. E. T. Pearson and Co., Ltd. Among the excellent products to be seen at the stand of C. and J. Hewlett and Son, Ltd., were "Evapogens," a series of medicated skin lotions, and "Iodermiol," a non-staining and non-irritant preparation of iodine. "Iron Jelloids" were being shown by the Jelloid Co. The "Sanitas" Co., Ltd., were demonstrating the virtues of "Sanitas Fluid" and "Sanitas Oil." The Huxley's Pharmaceutical Products., etc., exhibited their well-known "Betul-Ol" and "Colchi-Sal," among other interesting preparations. At the stand of Messrs. Oppenheimer, Son, and Co., Ltd., were noticed "Collosols," of mercury and silver, and "Pulticine," a new antiseptic substitute for poultices. Messrs. Wyleys, Ltd., of Coventry, were showing some friction cakes—liniments in solid form, and "Ruscol," an organic compound of bismuth and birch-tar in ointment form. The Saccharin Corporation, Ltd., exhibited "Novocain," "Pergenol," and "Trivalin" (Overlach), a new morphia preparation and nerve tonic.

Instruments and Appliances.

There was a particularly good display of every description of electro-therapeutical instruments and appliances, and the buzzing and sparkling of coils, interrupters, etc., made quite an agreeable accompaniment to the inspection of this section of the exhibition. Messrs. Newton and Wright, Ltd., were showing a new form of couch, complete with protective tube box for screen work and radiography from below, and fitted with an improved diaphragm compresser. The same firm also demonstrated a unique miniature X-ray set, adapted for carrying about. Messrs. Siemens Bros. and Co., Ltd., exhibited the "Oscillo-thermex," an outfit combining the apparatus necessary for diathermy. high-frequency treatment, and X-ray work. They also showed a series of radium applications of various sizes as well as radio-active materials and earths. At the stand of Messrs. Schall and Son we noticed a new high-frequency apparatus, the "Invictus," for use by medical men who do not possess, and who have no need for an X-ray installation. The firm's well-known "Pantostat," a universal apparatus for supplying current for various electro-medical purposes, was much in evidence. A new type of apparatus for giving the full body treatment, with smaller appliances for dealing with the limbs and parts of the body, was exhibited by the Dowsing Radiant Heat Co., Ltd., possessing many advantages over other forms. The principal features of interest at the stand of W. Watson and Sons, Ltd., were various improved forms of apparatus for X-ray work, including a modified form of tube box to the Ironside-Bruce Couch. The Cavendish Electrical Co., Ltd., were showing an apparatus, exhibited for the first time in public, for producing static currents from any X-ray coil, working with its own interrupter and switchboard, as usual. A collection of appliances utilised in ionic medication proved a most interesting exhibit. A neat and simple "Standard" set for X-ray work was shown by Harry W. Cox and Co., Ltd. An apparatus for producing absolutely pure ozone as an aid to ventilation was exhibited by Ozonair, Ltd., a unique modification of which was the form designed for the treatment of pyorrhœa alveolaris, chronic ulcers, etc. The well-known "Repello" and the Germ-Proof Clinical Thermometer were shown by Mr. G. H. Zeal. The Skeffington's Patent Recumbent Invalid Lifters were seen in active working, and their ease of manipulation and comfort appealed at once to all who have had the experience of lifting helpless patients. Some useful bedsteads and children's cots were shown by J. Nesbit-Evans and Co., of Birmingham. The Holborn Surgical Instrument Co., Ltd., had an interesting collection of instruments and appliances, among which we noticed the "Hedonal," and a "606" outfit. A series of incubators was shown by Chas. Hearson and Co., Ltd., suitable for every variety of bacteriological and pathological work. Anæsthetic apparatus and requisites for dentists were exhibited at the stand of Messrs. Claudius Ash, Sons and Co., Ltd. A large and comprehensive selection of instruments was shown by Messrs. Down Bros., Ltd., including many recent types and adaptations of earlier models. Messrs. Alexander and Fowler, Liverpool, were showing, among an interesting series of exhibits, some appliances and splints in a new alloy of aluminium, of the strength and hardness of mild steel, but only half the weight. Many different types of ophthalmoscopes and retinoscopes were shown by Messrs. Reiner and Keeler, Ltd.; Patent varus-boots and kidney belts and corsets were the special features of Messrs. Salt and Son's exhibit. Sir James Barr's apparatus for the treatment of serous effusions was among the instruments displayed by R. Sumner and Co., Liverpool. Messrs. Reynolds and Branson, Ltd., Leeds, showed an apparatus for oxygen and thorium inhalation. C. J. Hewlett and Son, Ltd., exhibited an improved lancet for quinsy, and an improved cervix cupper, among other new surgical instruments. Electric examination lamps, and the Hill-Herschel improved gastroscope were prominent amongst the exhibits of Messrs. Mayer and Meltzer. Various polygraphs and sphygmomanometers were shown at the stand of Messrs. Hawksley and Sons. John Weiss and Son, Ltd., exhibited a new surgeon's instrument-bag, with fitted trays, and many new models of ophthalmological and other instruments. The Scholl Manufacturing Co., Ltd., demonstrated the advantages of their patent arch supports for flat feet and other orthopædic appliances. At the stall of the Liverpool Lint Co. were specimens of "Vulnoplast," the newest and most complete dressing, with self-adhesive edges, as well as "Impermiettes," a substitute for ordinary rubber-coated sheetings. The merits of the Harcourt Chloroform Inhaler were demonstrated by Messrs. John J. Griffiths and Sons, Ltd. "Ronuk," Ltd., was much in evidence for polishes, stains and stoppings for preparing hard-wood floorings for polishing. Mr. C. A. Hoefftcke showed his appliances for joint diseases and fractures, including an apparatus for obtaining extension of the spine in various spinal diseases. An apparatus for rendering water radio-active was shown by Radium, Ltd.

Medical Books.

Many new and important medical works were on view, representing every branch of medical science. It is impossible to give a list of them all, or even of those which the practitioner who loves his library would fain add to his collection. We may mention a few, however. At the stand of Mr. H. K. Lewis were to be seen the tenth edition of Carter's "Elements of Practical Medicine"; Binnie's "Manual of Operative Surgery," re-written in one volume; and the fifth edition of "Public Health Laboratory Work," by H. R. Kenwood. At the stall of W. B. Saunders Co. we noticed the three octavo volumes of "Practical Treatments," by 82 specialists, edited by Dr. J. H. Musser; Moynihan's "Duodenal Ulcer" (second edition), and the "Collected Papers of the Mayo Clinic" 1905-11. Rebman, Ltd., had a good display of their latest productions, including Mulzer's "Therapy of Syphilis," Hirschberg's "Treatment of Short Sight," and Guelpa's" "Auto-intoxication and Disintoxication. Among the Oxford Medical Publications were Jamieson's "Care of the Skin in Health" Groves' and Brickdale's "Text Book for Nurses," and the fourth edition of Thomson and Miles' "Manual of Surgery." Messrs. John Wright and Sons, Ltd., were showing "An Index of Differential Diagnosis" of main symptoms, edited by Dr. Herbert French; the second reprint edition of Lejars' "Urgent Surgery," and Dr. Reginald Miller's "Medical Diseases of Children."

ANNUAL REPORT OF THE REGISTRAR-GENERAL FOR IRELAND.

According to the annual report of the Registrar-General for 1911, the decrease in the population of Ireland for the period 1901-11 was only 1.7 per cent., as compared with a decrease of 5.2 per cent. in the preceding decennial period. In the middle of 1911 the estimated population was 3,374,584; the number of births for the year was 101,758, and the number of deaths 72,475, or an excess of births over deaths of 29,283, which should be the natural increase in the population of the country, but as the emigration amounted to 30,573 there was a loss in the population of 1,290. In the return the decrease compared with 1910 is 3,205. The estimate is, however, only for the middle of the year, while the other figures embrace the entire year. The deaths represent 16.6 per 1,000, while the loss by emigration is 7.0 per 1,000, or nearly half the death rate. Taken together, deaths and emigration amount to 23.6 per 1,000, while the birth-rate is but 23.3. The yearly average emigration rate for 1901-10 was 7.9 per 1,000, so that the loss last year was well below the average of the preceding decade. Practically only those in the prime of life emigrate. In the year under review 85.7 per cent. were between 15 and 35 years of age, and only 6.7 per cent. were 35 years or upwards.

The total marriages registered in 1911 numbered 23,473, representing a rate of 5.37 per 1,000, this rate was 0.32 above that for the previous year, and 0.21 above the average for the ten years 1901-1910. In the year 93.9 per cent. of the husbands and 98 per cent. of the wives wrote their names in the marriage registers, whereas in 1864 only 61 per cent. of the men and 50 per cent. of the women married were able to write their names.

In the provinces the highest marriage rate was in Ulster; in the county or county borough areas the highest rate was in the county borough of Belfast and the lowest in the county of Galway. Leinster had the highest birth rate, Munster being next, Ulster third, and Connaught last. The county or county borough areas which had the highest birth rate were in the following order:—Dublin Co. borough, Belfast Co. borough, Kerry, Limerick county and borough, Mayo, Antrim, Tipperary. It appears that of the children born in Ulster 3.7 per cent. were illegitimate; in Leinster the percentage was 2.9; in Munster 2.2, and in Connaught 0.7. The recorded death-rates for the four provinces were as follows:—Leinster, 18.5; Ulster, 16.8; Munster, 15.5; and Connaught, 14.0 per 1,000. The counties having the lowest mortality rates per 1,000 of the population were Kerry and Leitrim, each 12.8; Roscommon, 13.7; Galway, 13.8; Mayo, 14.0; and Tipperary North Riding, 14.4. The highest rates were as follows:—Dublin Co. borough, 24.1; Tyrone, 18.7; Armagh Co., 18.1; Kilkenny Co., 17.7;

Monaghan Co., 17.4; Wexford Co., 17.1; and Belfast Co. borough, 17.0.

There died from tuberculous disease 9,623, compared with 10,016 in 1910, a decrease of 393. Since the year 1904, in which the recorded death-rate from tuberculosis was 2.9 per 1,000, the rate had fallen to 2.2, which is the lowest rate yet presented by Ireland. The Registrar-General observes that:—"The decline in the mortality rate for tuberculosis in Ireland, which has commenced, cannot be dissociated from the foundation of the Women's National Health Association in 1907, and the personality of its founder, who continues to inspire its work." Of the twenty-two principal causes of death tuberculosis still heads the list in this country. It has been stated already that the death-rate from this disease was 2.2 per 1,000 in Ireland in 1911; the rate for Scotland was 1.8, and for England 1.4. It is not uninteresting to glance at the return of deaths from tuberculosis registered in each county in Ireland. All the west of the country from Donegal to Kerry has a low rate; also Louth, Meath, Monaghan, Cavan, Queen's Co., Tipperary, Kilkenny, and Carlow. The North-East corner of Ulster has a high rate; Dublin has an exceptionally bad record; the death-rate in Cork from the disease is rather high; Kildare, Wexford, Waterford, King's Co., and Westmeath are well above the average rate.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Aug. 17th, 1912.

ECZEMA OF THE FEMALE BREAST.

This form of eczema is never observed, according to Dr. Sabouraud, in the aged, but frequently in young girls. It is seated around the region of the nipple, existing generally on both sides, but always more intense on one or other and is of despairing tenacity. The nature of the eczema is an epidermitis, rose, moist, covered with yellow crusts that the under-jacent exudation detaches but incessantly renewed. Under ordinary treatment the affection improves and hopes are entertained of speedy cure, when suddenly it reappears and the whole treatment has to be gone over again.

When the eczema comes on during gestation, the breast gets enlarged, and pressure on the nipple forces out a drop of serosity.

Eczema of scabies is easy to diagnose by its pustular form, while examination of the hands, elbows, etc., would clear up any doubt.

The treatment of this obstinate form of eczema is not however, very difficult. It is useless in the first place, to waste time on such anodynes as poultices, wet compresses, sprays, creams, etc. A strong solution of nitrate of silver (1-15) passed freely over the inflamed surface is the only effectual treatment. After this application, a piece of lint coated with the following ointment, followed by a slight compression by means of cotton wool and a bandage terminate the dressing:—

Oxide of zinc, 1 dr.
Vaseline, 5 drs.
Lanoline, 1 dr.
Rose water, 1 dr.

Eight days afterwards the skin will be black, but generally the eczema will be found to be cured. Isolated patches may remain which will require a little stronger solution (1-10).

Where the eczema is found on the face and neck as well as on the breast, it is not a case of eczema of the breast proper, but of a more or less generalised eruption. In such cases the nitrate of silver does not succeed as well as the tar ointment:—

Coal tar (washed), 1 dr.
Lanoline, 1 dr.
Vaseline, 6 drs.

As eczema is always epidermic and consequently never leaves behind a cicatrix, the patient may be assured that the skin will return just as fine as before, and that fact will encourage her to accept without hesitation the treatment.

VARICOSE ULCERS.

The following method for treating varicose ulcers is much recommended by a surgeon as superior to all others. The leg is placed on an inclined plane (45°), the body keeping the horizontal position. After the limb is covered with a fine gauze or linen, ironed on both side to make it aseptic, a strong compression of the leg is made by an elastic band, beginning at the toes and reaching the knee. In this way ischæmia is obtained similar to that by Esmarch's band. As soon as the band has been rolled up the leg, it is removed, and the ulcer treated by the usual topics and a dressing applied; the patient wearing an elastic stocking can get up and walk. The elastic band, by compressing the dilated capillaries as well as the small veins and lymphatics, removes from the tissues the products of congestion, allowing thus fresh blood to circulate in the arteries. A better nutrition of the ulcer is the result and the healing more rapid. Varicose eczema can also be treated with advantage by the same method.

GERMANY.

Berlin, Aug. 17th, 1912.

AT the meeting of the Charité Aerzte, Hr. Munter gave a short history of a case of

MISTAKEN DIAGNOSIS.

He showed to the meeting an impression taken from a man who had in the meantime died. It was a very typical case of mistake. The disease was really one of tuberculous ulcer of the lip that had over and over again been pronounced to be a hard chancre. The patient was a joiner, æt. 33, who had suffered from tuberculosis for twelve years. Last November he hurt his upper lip with a splinter of wood. This developed into a sore, which last January suddenly became swollen. He visited a hospital, where a diagnosis of hard chancre was arrived at. The Wassermann test was applied with a negative result; a search was made for spirochætæ, also with a similar result. He was nevertheless sent into hospital for the purpose of undergoing a course of specific treatment. He left the hospital for external reasons and went to the Charité, where a diagnosis of tubercle was made, with the aid of the specialists in diseases of the skin. Numerous tubercle bacilli were found in the ulcer, also others in other parts of the mouth. If tubercle of the skin were divided into its different forms—the lupoid, the fungoid and the ulcerous, which Lesser had described as the flat ulcer with shallow, partly granular base, the miliary and the so-called tuberculide—the case before them was of the ulcerous variety. These ulcers often formed around the natural openings, especially around the anus, and the genitals in prostitutes. Apparently this tuberculous ulcer had had a different appearance. It did not now look like a hard chancre, but a soft ulcer as described by Lesser. Tuberculosis of the skin might also have the appearance of epithelioma. In that case they had flat ulcers with small white nodules on the inner side of the lips, yellowish plaques, which looked like plaques muqueuses, and flat ulcers on the tonsils. Like most of the cases the disease was secondary.

At the Gynæcologische Gesellschaft, Hr. Haendly showed a case in which the Röntgen rays had been applied to a case of

CARCINOMA OF THE CERVIX UTERI.

The case was one of inoperable cancer. The discharge was copious, bloody and foul-smelling. There was a distinct shrinking of the tumour under the treatment. Both hæmorrhage and foulness were less. During the treatment a rise of temperature took place with general symptoms. The mucous membrane of the vagina bore the rays better than the external skin. Lead-glass tubes were made use of, which were screwed on to the tube holder. The result was an encouragement to further trial in that direction.

Hr. Bumm had also used the rays in a case of inoperable cancer of the cervix uteri with distinct benefit; he was of opinion that it was worth trying in cases too far gone for operative removal.

Hr. Gutzmann gave a short account of an

Unusual Case of Labour.

A woman, æt. 33, was admitted into hospital on December 21st. Condition normal, pregnancy. There were no other signs of disease but one, and that a slight murmur at the mitral valve. The next day she had a headache, cough, and severe general symptoms. On the 24th there was hæmorrhage into the conjunctiva and bleeding from the nose. A day later spontaneous labour, which was normal. The symptoms otherwise continued very grave—high fever, parotitis, splenic tumour. Death in four weeks. The autopsy showed endocarditis, endarteritis, endometritis, etc. Bacteriologically nothing but pneumococci were found. The sepsis must have begun in the endocardium, and from there passed on to the uterus.

Hr. Franz discussed the question:

How Can the Permanent Results of Operation for Cancer of the Uterus be Improved?

He believed that improvement lay above all things in improved *technique*. It was observable that with improved *technique* the results improved. That which was difficult to avoid was relapses from inoculation and infection. He did not use forceps for clamping the connective tissue by the side of the uterus, as he could not remove sufficiently radically by doing so. The deep lateral connective tissue must be dragged out. Tearing of the cervix must be avoided. At present it was not possible always to avoid inoculation. Recurrences should be removed, whilst Wertheim was of opinion that they should not be attacked. (Your correspondent would very strongly support Franz in this.) A timely discovery of recurrence could only be made by careful watching. Nodules might be nothing but connective tissue. The results, therefore, were to be improved by improved *technique*, great dexterity, gained by wide experience, watchful observation of cases, and more frequent operation in cases of relapse.

Hr. Mackenrodt thought that fat patients were more fitted for operation by the vaginal route than the abdominal. Age need not be considered. Operation had its limits when the disease had attacked the levator ani muscle. For preparation he recommended tr. iodi; he had given up the cautery, as it so often led to vesicovaginal fistula.

Hr. Bumm saw no advantage in widening the range of operability, and was in favour of disinfection of the vagina and of the clamp. He would not recommend operation for recurrences.

Hr. Franz, in reply, said he was opposed to the last opinion expressed. He had never denied that infection might be set up by a carcinoma.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

BELFAST.

The Irish Milk Supply.—The Irish Milk Supply Commission has been holding sittings in various parts of Ulster, and the evidence offered by medical and other witnesses is in many cases most interesting, as it throws light on the social condition of the people. The supply of milk seems to vary enormously in different localities; in many of the small towns it is abundant; it is the money to purchase it which seems lacking. It seems also that there is great ignorance among the people as to the value of milk as food; they prefer to spend their money on tea and whisky, and the poor children are brought up on baker's bread and these beverages. In the remote parts of Donegal where a farmer seldom has more than one cow, his family has to go without milk for many weeks in the year, and if potatoes fail at the same time, they live on tea and bread. It appears that the Congested Districts Board, which has done so much to improve the breed of cattle, has aimed at improving the beef rather than the milk. In Londonderry the milk supply is abundant and of good quality, but, as in Belfast, much difficulty is experienced by the authorities in maintaining the quality of the buttermilk, which is constantly below par. There can be little doubt that the Inquiry is bound to do good.

County Down District Lunatic Asylum.—The annual report issued by Dr. M. J. Nolan, the Medical Superintendent of the Down District Lunatic Asylum, is always an interesting document, and coming as this does, a week after Dr. Graham's report on the Belfast District Asylum, it is doubly so, for both men travel beyond mere statistics, and give some results of their long experience in their general observations. While Dr. Graham puts his trust in the State, and better conditions of life brought about by a more advanced stage of evolution, Dr. Nolan emphasises his belief that while the State can do much, the individual can do more. "Prevention is largely in the hands of the State, but it is more immediately in the hands of individuals. For there can be no question but that the more practical application of Christian teaching would combat much of the stress that leads to insanity. The State doubtless may do much by philanthropic legislation to minimise the more distressful conditions of life—poverty, disease and ignorance. But even the most benevolent legislation may be rendered useless in individual cases where failure of the exercise of true Christian principles perverts the would-be blessing into a curse." As regards the year's work, Dr. Nolan reports 899 cases treated during the year—a daily average of 756. The recovery rate was 44.2, as compared with 36.5 for Ireland generally. The net average cost per patient was £22 3s. 6d., a reduction of 7s. 8d. on the previous year.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE NECESSITY FOR A NECROPSY IN EVERY CASE OF DEATH.

To the Editor of The Medical Press and Circular

Sir,—In your last issue you kindly allowed me to add my testimony to that of Dr. McWalter, who, in his admirable paper in your previous issue under the above heading, had clearly demonstrated the uselessness of the Registrar-General's returns as at present compiled, when regarded from the point of view of medical or statistical science. I wrote particularly on the subject of infantile mortality, and although I felt that my statements were unimpeachable, I did not expect to find them corroborated from an authoritative source at the moment when they were appearing publicly in print. Since my letter was published, however, there has been issued the report of a Special Committee of the Royal Statistical Society to inquire into the systems of various countries for the registration of births (including stillborns) and deaths with reference to infantile mortality. It is stated that the scope of the inquiry was extended considerably beyond that originally suggested, and the report covers practically the whole system of registration and the calculation of vital statistics. It discusses the history of registration, the practice of registration in general, still-births, and statistical methods. Information has been collected from many sources within the British Empire, from European nations, the United States, and South American Republics. The answers dealing with the efficiency of registration convey, with few exceptions, opinions that registration is very fairly complete. The registration of still-births is not required by law in the United Kingdom, in many of our colonies, and in many foreign states. It seems that no Legislature has up to the present enacted any definition of still-birth, and the only guidance afforded to those required to declare and inscribe such births in places in which their registration is compulsory is that afforded by regulations made by the statistical offices.

It is pointed out that at the present time the principal function of vital statistics is the examination of the causes of unnecessary and preventable wastage of life and sickness. Vital statistics may, in effect, be regarded as taking the place of laboratory experiments in social physiology and pathology. The Committee insists that if such views be accepted as correctly representing the functions of statistics, it is evident that reliable conclusions cannot be obtained unless the basic *data* are reliable and accurate, and the methods of calculation used by different inquirers uniform, or at least strictly comparable. These latter utterances precisely express the contentions set forth by Dr. McWalter and supported by myself. Let us hope they may find a speedy acceptance by our responsible Government Departments.—I am, Sir, yours truly,

STATISTICIAN.

Birmingham, August 16th.

EXERCISE AND TRAINING.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—In the *Daily Mail* of to-day (August 16), there is an article of much interest to most university men, entitled "A Wrong View of Amateur Sport." Those who consider the question of exercise and training from a medical point of view, and have some practical knowledge of the absolute necessity of studying this question physiologically and anatomically if they wish to arrive at sound conclusions, will not agree with Mr. W. Beach Thomas, "how old members of a university crew or those who have coached them can hold such a theory is not easily understood."

The simple question that most university men consider when they go in for boating or any other kind of exercise is really whether they are helped or not by it in the prime object of university life, that is in the steady promotion of their knowledge of those subjects of study to which they are devoted. Our best men at the universities in classics and mathematics have generally been eager athletes, for the simple reason that they found how much depends on "mens sana in corpore sano," and that constant steady exercise is of immense value when reading and working up for such exams as the Triposes at Cambridge or the Schools at Oxford. Exercise is one thing, and Training is another. To make the former impossible without the latter is just what "old members of a university" object to, and the reason why they "argue that the athlete who trains hard under any tutorship and specialises in any particular way does somehow soil and weaken his sportsmanship by taking this trouble," is really because the mind is so much diverted from proper work and taken up by training, that disappointments come, and sad reflections. As many of our profession are interested in the character and tone of university life and can undoubtedly influence the views that are entertained at our universities on such questions as Exercise and Training, if we only give some thought and attention to them, we may do well to do so when we see so much uncertainty prevailing between the old members of university crews, and such men as "the ex-president of the Oxford University Athletic Club."

I am, Sir, yours truly,
EXERCISE AND TRAINING.

OBITUARY.

PROFESSOR J. J. CHARLES.

WE regret to announce the death of Professor J. J. Charles, which event occurred at Portrush on August 10th. His death removes what was for many years a familiar figure and a striking personality to past medical students of Queen's College, Cork. Born in 1843 at Cookstown, he obtained the M.D. degree with honours in the Queen's University of Ireland in the year 1865, and a few years later the M.A. degree in connection with which he was awarded two gold medals. After this Arts distinction, he was appointed Demonstrator of Anatomy in Queen's College, Belfast, which post he held for a period of over six years. In 1875 he succeeded the late Dr. Corbett in the Chair of Anatomy and Physiology in Queen's College, Cork. He was the third occupant of this Chair since the foundation of the College, and for a period of over thirty years he discharged its onerous duties with a keen sense of his responsibilities, with marked dignity, extraordinary attention to detail, and genuine solicitude for his pupils' progress—all qualities that were eminently characteristic of the man.

MR. C. E. HUTT, OF TOTTENHAM.

WE regret to announce the death of Mr. Charles Edward Hutt, of Tottenham, which took place last week, after a brief illness, at his residence, 626, High Road, at the age of 47. The deceased, who studied at St. Bartholomew's Hospital, qualified as L.R.C.P. Lond., and M.R.C.S. Eng., in 1888. He came to Tottenham some sixteen years ago, when he succeeded to the practice of Dr. Wunderlich. Painstaking and conscientious in all his work, Mr. Hutt soon acquired a high reputation among the inhabitants of the district, as well as his professional colleagues, by whom he was greatly respected. He was formerly resident medical officer to the Hertford General Infirmary, and he was at one time surgical registrar to the Prince of Wales's General Hospital. He was also chairman of the Tottenham Division of the British Medical Association. His genial presence will be sorely missed at the gatherings of the Tottenham Medical Club, with which he was connected. Mr. Hutt was formerly an indefatigable worker in the interests of the North-East London Clinical Society, of which he was the first honorary secretary, being appointed to that office upon the foundation of the society in 1900. His sterling qualities and earnest work earned for him the post of president, after five years of laborious secretarial duties unremittingly performed. Only those who have served in a similar capacity in the case of a newly-formed society know what self-sacrifice is needed in order to make the thing "go" well, and this personal service Mr. Hutt freely and willingly gave. He had been the victim of cardiac trouble for some few years past, but this had seemed to improve of late. A severe anginal attack, however, seized him on the night of the 13th inst., to which he succumbed in spite of every medical aid. Widespread sympathy is felt with his widow and her young family in their bereavement.

DR. HENRY YATE PITTS, LIVERPOOL.

WE deeply regret to announce the death of Dr. Henry Yate Pitts, which took place on Sunday, the 11th inst., at his residence, Victoria Road, Tue Brook, Liverpool. Dr. Pitts, who at the time of his death was in his 64th year, had been in failing health for some time. For very many years he was Medical Officer to the Liverpool Seaman's Orphanage, where the writer has no hesitation in saying that his presence was always like a gleam of sunshine to old and young. He was, after saying so much, naturally very popular with the children, as they, as well as all others with whom he was brought into contact, could not fail to see that any attentions his position required him to give, were always wholehearted, and never given grudgingly. For many years also, each Christmas Day as it came round found him at the Orphanage, helping to assist in serving the little ones and doing his all to make the day a happy one for them.

Not only by those associated with him in that noble Institution, but by all brought into contact with him in daily life, will he be held in grateful remembrance. He was an ornament to his profession, which demands from its members that they shall be bright, true hearted, sympathising, ever ready to give of themselves for the good of their fellow creatures.

The deceased was born in Liverpool, studied mostly in his native city, was a member of the Royal College of Surgeons of England, and Licentiate of the Royal College of Physicians of London, and spent most of his life in practice in a suburb of Liverpool.

His funeral took place on the 14th inst. at Anfield Cemetery. Amongst other mourners who followed his remains to the grave were the following fellow members of the profession:—Professor Rushton Parker, Alderman Dr. Thomas Clarke, J.P., Dr. Percy Edwards, Dr. Benjamin Price, J.P., Dr. W. Blackledge, and Dr. J. P. Hall.

REVIEWS OF BOOKS.

WALLIS'S SURGERY OF THE RECTUM. *(a)*

For no very good reason diseases of the rectum have received scant attention by the general practitioner; and yet they are extremely important from the patients' point of view. We, therefore, welcome this manual, although we cannot but deplore the sad circumstance that the talented author died before this work was completed. The volume deals with all those affections of the rectum and anus commonly encountered in general practice. In the chapter on the symptoms of rectal disease some valuable remarks are made which will prove of great value to those who bear them in mind. The various forms of colitis are next considered, and a chapter is devoted to venereal affections of the rectum and anus. In the chapter dealing with anal fissure the author gives it as his opinion that dilatation of the sphincter is not always an essential preliminary to operation on this region. Very interesting and instructive are the author's remarks on pruritus ani. Examination of a large number of cases in his practice revealed the presence in over 90 per cent. of a small ulcer just within the anal margin, and always below the internal sphincter. A condition, which Sir Frederick Wallis terms ano-rectal ulceration, is referred to. This is an ulcerative state of the mucous membrane of that part of the bowel which lies between the anus and the internal sphincter. It is often the starting point of many of the ordinary rectal ailments.

Some very useful hints are given on the diagnosis and treatment of rectal and peri-rectal abscesses and fistulæ. The chapter on hæmorrhoids supplies the reader with a vast amount of original advice on the management of this extremely troublesome and painful affection. There are also special chapters on prolapse and neoplasms of the rectum, together with an account of the methods of excising the rectum and of performing colostomy. The concluding chapter on rectal diseases in children makes a suitable ending to a book whose practical teaching on diseases of the rectum we believe has no equal in the English language. The practitioner who takes the trouble to study and to carry out the author's advice will find in the gratitude of his patients more than recompense for the trouble he has taken to make himself acquainted with diseases of this region.

HERRINGHAM ON KIDNEY DISEASES. *(b)*

Within recent years a great deal of original work has been done in connection with diseases of the kidney. It is, therefore, fitting that a volume on this subject should be included in the series of "Oxford Medical Publications." Dr. Herringham has given us a thoroughly up-to-date account of these diseases, which contains a vast amount of original thought and suggestion. While not neglecting to refer to the work of others in the same field, the author has for the most parted stated his own personal opinions. Some of his sentences really savour of golden rules. Take, for example, the following specimens: "I have known complete anuria rapidly relieved by leeches"; "Acute nephritis is not a common disease"; "Diffuse nephritis can produce hypertrophy of the heart and arterial sclerosis": We have been struck, in reading the pages of this interesting and stimulating volume, with their freshness of expression and statement. At times the author may appear to be very dogmatic, but in every case the evidence on which his statements are based warrants him in adopting such an authoritative attitude.

Dr. Williamson's contributions on renal diseases in pregnancy are extremely valuable. His remarks on pyelitis are of special interest, although we cannot altogether endorse some of them. He divides the cases into six distinct groups all of which we consider are quite definite and well recognised in practice. His statement, however, that the urine in such cases, as a rule, has no offensive odour we are inclined to question. The advice given regarding the treatment of pyelitis is sound and practical, and we are pleased to note that he counsels against prescribing urotropine or helmitol in tablet form. Personally Dr. Williamson always uses autogenous vaccines in such cases, given every third day in increasing doses until 50 million bacilli is reached.

This monograph on diseases of the kindey is a most valuable contribution to medical literature. It contains all that the general practitioner is likely to require in the way of information as to the diagnosis, prognosis and treatment of these diseases; and we can accordingly recommend it as in every respect a most convenient and practical work of reference.

THE THERAPY OF SYPHILIS. *(a)*

As Professor Uhlenhuth remarks in his preface to this book, the work of the Imperial Health Bureau paved the way for the improvement in the treatment of syphilis and directly promoted it by the discovery thereat of the *spirochæta pallida.* It is natural, therefore, that Dr. Mulzer's little work should consist of a eulogy of arseno-therapy, accordingly we find eleven pages devoted to the influence of the results of syphilitic research upon the former mercurial treatment of the disease, while the rest of the book is taken up with a full account of the different arsenical preparations which have been tried and discarded in favour of the now famous dioxydiamidoarsenobenzol, or "606," the virtues of which are extolled, though in the last section the author admits that the principle of *sterilisatio magna* of Ehrlich has not been realised. He concludes that the practitioner should employ arseno-benzol in cases which are refractory to mercurial and iodine therapy, or which have been little influenced by these drugs. The contra-indications for the use of the new remedy are plainly set forth, and the advisability of employing mercury in conjunction with it is laid down. A comprehensive bibliography is given at the end, and there is a very full index. In our opinion, this book is a helpful guide to the modern treatment of syphilis.

TUBERCULIN IN TUBERCULOSIS. *(b)*

This book is mainly a vindication of the work and theory of Koch, after nearly fifteen years of careful and laborious observations on the part of the author who firmly believes that he is in the position to prove the truth of the following propositions as laid down by Koch;—"(1) *Tuberculin is an invaluable* and *indispensable* agent in the diagnosis of early tuberculosis, especially pulmonary tuberculosis; (2) the early stage of pulmonary *tuberculosis can be cured with certainty by means of tuberculin.* Dr. Camac Wilkinson is known to hold somewhat advanced views with regard to the use of tuberculin, but he is not afraid to speak out against the sceptical attitude which has been, perhaps unfortunately, adopted by many of the heads of the medical profession concerning the utility of this remedy in consumption. The tone is somewhat too controversial, but the author has the strength of his own convictions, and, what is more, these are backed up by actual clinical experience with the administration of tuberculin.

(a) "Surgery of the Rectum, for Practitioners." By Sir Frederick Wallis, M.B., B.C.Cantab., F.R.C.S., Surgeon to Charing Cross Hospital, St. Mark's Hospital, and the Grosvenor Hospital for Women and Children. London: Henry Frowde and Hodder and Stoughton. 1912. Price 15s. net.

(b) "Kidney Diseases." By W. P. Herringham, M.D., F.R.C.P., Physician to St. Bartholomew's Hospital, etc., etc. With chapters on Renal Diseases in Pregnancy, by Herbert Williamson, M.D., F.R.C.P., Assistant Physician-Accoucheur to St. Bartholomew's Hospital, etc., etc. London: Henry Frowde and Hodder and Stoughton. 1912. Price 15s. net.

(a) "The Therapy of Syphilis: Its Development and Present Position." By Dr. Paul Mulzer, Berlin, with a Preface by Professor P. Uhlenhuth, M.D., P.C. Translated by A. Newbold. Pp. xv. and 247. London: Rebman, Ltd. 1912.

(b) "Tuberculin in the Diagnosis and Treatment of Tuberculosis. Weber-Parkes Essay, 1909, with additions." By W. Camao Wilkinson, B.A.Syd., M.D.Lond., F.R.C.P. Sup. roy. 8vo., pp. 492. London: James Nisbet and Co., Ltd. 1912.

The first four sections of the book deal with "the greatest problem in medical science" as met with in the laboratory, in man, and for the physician. Since 1891, Dr. Wilkinson has treated more than 120 patients in the first stage of consumption, and not one of these has progressed to the second stage. With such a powerful remedy in their hands, the author believes that the medical men of to-day "have the opportunity to perceptibly reduce the death rate from tuberculosis two or three years hence." The limitations and shortcomings of sanatorium treatment as investigated by Weicker are confirmed by the author who states that if he had obtained such results (relapses, etc.) in his practice he would have been almost in despair. A large number of case-records and charts are given. The rest of the book is occupied with the *technique* of tuberculin injections, and the *rôle* of the tuberculin dispensary in combating tuberculosis among the poor. We have no hesitation in saying that Dr. Wilkinson's book is one to be carefully read and pondered over by all who are brought into contact with the consumptive.

SANDERS' MODERN METHODS IN NURSING. (*a*)

This is a volume of nearly 900 pages giving information not only on matters connected with nursing proper but also on bandages and splints, drugs and their doses, poisons and their antidotes, bacteriology, diets and dieting. The great fault which we have to find with this book is that it attempts too much. Thus we cannot see why a nurse should be taught methods of staining for bacteria or of making cultures. This is no part, or should be no part of her work. In these days there is far too much glib talk on the part of nurses about matters which only concern the properly trained practitioner. The nurse will do well to stick to her own peculiar function, namely the nursing of the patient. We regret, therefore, that we cannot give our unqualified approval to this book which, if intended for students and medical men, should have been written by a qualified man, but as it is only intended for nurses contains information on matters absolutely foreign to a nurse's work as that is usually understood. We therefore consider some of these plates, such as that of sphygmograms, as absolutely superfluous. The value of the book would certainly be increased were its size considerably reduced.

DISEASES OF THE EYE. (*b*)

All ophthalmic surgeons who are engaged in instructing students will welcome the appearance of a second edition of Mr. Stephen Mayou's "Diseases of the Eye," Taken all round, it is one of the most useful students' books on the subject. The general form of these manuals, of which it forms one, is excellent; the price is low, which is a great consideration to the student; and while no important subject is omitted, the text is not overloaded with a mass of detail which deals with non-essentials and confuses the student.

The plain illustrations, many of them from original photographs, are very helpful, though the coloured plates are not up to the standard of the rest of the book. It would, we think, be better if one really first-rate coloured plate of the normal fundus were substituted for the eight rather primitive coloured illustrations now included. An important feature of the book is the full and clear account given of the more common eye affections, such as the general practitioner is called upon to treat. Conjunctivitis, trachoma, phlyctenular ophthalmia, and keratitis are all excellently described. A few statements might be criticised, such as that on p. 41, that in myopia the full correction with glasses should be ordered for distance in all cases; on p. 111, that patients who are the subjects of interstitial keratitis have suffered from congenital syphilis; and on p. 140, that in sympathetic iridocyclitis there is always keratitis punctata in the exciting eye. Such statements seem to us too sweeping and need some modification. But these are small blots on an excellent little book.

LITERARY NOTES.

Mr. H. K. Lewis announces for early publication new editions of "Mind and its Disorders," by Dr. W. H. B. Stoddart, of the Bethlem Royal Hospital; "Clinical Bacteriology and Hæmatology for Practitioners," by Dr. W. d'Este Emery, and "Materia Medica and Pharmacy for Medical Students," by Mr. R. R. Bennett, Pharmacist to University College Hospital. The same firm has in hand a new edition (the sixth) of Dr. Lewis Jones' "Medical Electricity." This will contain several new illustrations, and will be brought thoroughly up to date. A new book on Ionisation is in preparation by the same author, and will be issued at an early date. Mention may be made of new editions just issued of three well-known books:—"The Diseases of Women," by Dr. Lewers; "The Elements of Practical Medicine," by Dr. Carter, of Birmingham; and the fifteenth edition of "The Extra Pharmacopœia," by Drs. Martindale and Westcott, this edition being considerably enlarged, and the matter arranged in two volumes, for convenience of reference.

* * *

We have received from Messrs. Bale, Sons and Danielsson, Ltd., a copy of a lecture by Mr. George Thomson, L.D.S., entitled "Sleep and Digestion." The lecture seems to have been delivered to a lay audience, and is now printed "with the earnest desire to disseminate common-sense views concerning health." The views expressed are common-sense, but the form of expression is a mixture of common-place and rhetoric which is unpleasant to read. The tract is published at the extravagant price of one shilling.

* * *

The following new books are announced for early publication by Messrs. J. and A. Churchill:—"The Malformations and Congenital Diseases of the Fœtus." By Prof. Dr. R. Birnbaum, Chief Physician to the University Clinic for Women at Gottingen. Translated and annotated by Dr. G. Blacker, Obstetric Physician, University College Hospital. "Digestion and Metabolism. "The Physiological and Pathological Chemistry of Nutrition. By Alonzo E. Taylor, M.D., Rush Professor of Physiological Chemistry, University of Pennsylvania, Philadelphia. "The Evolution of the Vertebrates and Their Kin." By Wm. Patten, Ph.D., Professor of Zoology, Dartmouth College. "Meat Hygiene, with Special Consideration of Ante-mortem and Post-mortem Inspection of Food-Producing Animals." By Prof. Richard Edelmann, Ph.D., of Dresden. Translated by John R. Mohler, A.M., V.M.D., and Adolph Eichhorn, D.V.S.

NEW PREPARATIONS.

"VAPOROLE" CHLOROFORM AND ETHYL IODIDE COMPOUND.

We have received specimens of a new product issued by Burroughs Wellcome and Co., known as "Vaporole" Chloroform and Ethyl Iodide Compound,

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(*a*) "Modern Methods in Nursing." By Georgina J. Sanders, formerly Assistant Matron at Addenbrooke's Hospital, Cambridge, etc., etc. With 228 illustrations. Philadelphia and London: W. B. Saunders Company. 1912. Price 12s. 6d net.

(*b*) "Diseases of the Eye." By M. Stephen Mayou, F.R.C.S., Surgeon, Central London Ophthalmic Hospital, &c. Second Edition, with 124 illustrations and eight coloured plates. Oxford Medical Manuals. London: Henry Frowde and Hodder and Stoughton.

which is intended for use by inhalation. It consists of a combination of chloroform, ethyl iodide and menthol, put up in hermetically-sealed capsules of delicate glass, and is issued in boxes of six. Each capsule is surrounded with absorbent material enclosed in a silken sac, so that when the product is to be used it is only necessary to crush the capsule and inhale the contents. "Vaporole" Chloroform and Ethyl Compound is recommended for all forms of laryngeal spasm, as, for example, in the dyspnœa of bronchitic asthma, in whooping cough and in œdematous laryngitis.

"WELLCOME" BRAND STREPTOCOCCUS VACCINE, DENTAL.

The treatment of pyorrhœa alveolaris by means of bacterial vaccines is a measure which of late has been employed somewhat extensively, and has met with a considerable degree of success. In the majority of cases of pyorrhœa it is found that the predominant organisms are streptococci. Messrs. Burroughs Wellcome and Co. have therefore issued, for use in this condition, the "Wellcome" Brand Streptococcus Vaccine, Dental, which contains several strains of streptococci obtained from cases of pyorrhœa alveolaris and septic conditions of the teeth and gums. It is a carefully prepared vaccine, produced under expert bacteriological control, and is issued, in hermetically-sealed 1 c.c. phials, in two dilutions, containing respectively 10 million and 50 million organisms. The dose of this vaccine is 5 million organisms, gradually increased to 50 million, and it may be given at intervals of seven to ten days.

MEDICAL NEWS IN BRIEF.

The Ophthalmological Section of the Royal Society of Medicine.

The inaugural meeting of the newly-formed Section of Ophthalmology of the Royal Society of Medicine will be held on Wednesday, October 23rd, at 8.30 p.m. All registered medical practitioners are eligible as members of this Section. The Council of the Society has resolved to offer special terms to new members of this Section who also become Fellows of the Society. These terms can be obtained on application to the Secretary of the Society. Only those whose applications for either Fellowship or Membership have been received on or before October 5th and have been accepted by the Councils of the Section and of the Society will be qualified to take part in the inaugural meeting.

The National Insurance Advisory Committee.

Twenty-seven medical practitioners have resigned from the National Insurance Advisory Committee in accordance with the decision reached at the representative meeting of the British Medical Association. These include all the thirteen nominated by the Association to serve on the Committee, whose names are as follows: Dr. John Adams, Glasgow; Dr. R. M. Beaton, London; Dr. T. M. Carter, Bristol; Dr. J. S. Darling, Lurgan; Dr. S. Hodgson, Salford; Dr. J. A. Macdonald, Taunton; Dr. J. Munro Moir, Inverness; Mr. James Neal, Birmingham; Dr. E. O. Price, Bangor; Mr. D. F. Todd, Sunderland; Mr. E. B. Turner, London; Mr. T. Jenner Verrall, Bath; Dr. A. H. Williams, Harrow.

The resignation of those medical members nominated by the Government are as follows: Dr. G. R. Livingston, Dumfries; Dr. H. A. Latimer, Swansea; Sir Frederick Eve, London; Dr. John D. Lloyd, Chirk; Dr. J. W. Mulligan, Abersychan, Monmouthshire; Dr. J. Edgar P. Davies, Llanelly; Miss M. H. F. Ivens, M.B., Liverpool; Dr. P. T. O'Sullivan, Cork; Mr. W. Courtney Milward, Cardiff; Dr. E. J. Maclean, Cardiff; Dr. R. McKenzie Johnston, Edinburgh; Dr. D. Elliot Dickson, Fife; Dr. Anne M. Watson, Aberdeen; Dr. Lauriston E. Shaw, London.

The British Medical Association issued a statement last week replying to the resolution of the minority (14 in number) in order "to remove any suspicion that there is an official revolt in its ranks. The publication of the announcement that 14 members have refused will naturally lead some people who are not familiar with the position to assume that the medical members of the Advisory Committee are not prepared to act in accordance with the policy of the Association. Now, this is not the case, and it ought to be made clear to the public that every member nominated by the British Medical Association to serve on the Advisory Committee has already actually resigned. And in addition to these gentlemen, of whom there are 13, other 14 have resigned, making 27 in all."

The names of those who have not resigned are as follows: Dr. Addison, M.P.; Sir Clifford Allbutt, Dr. Clement Belcher, Mr. C. J. Bond, Sir John Collie, Mr. Adam Hamilton, Mr. M. St. L. Harford, Mr. Herbert Jones, Dr. Arthur Latham, Dr. H. H. Mills, Sir Shirley Murphy, Dr. George Reid, Dr. John Robertson, and Professor Sims Woodhead.

Ptomaine Poisoning on a Cable Ship.

An outbreak of ptomaine poisoning from the consumption of tinned food occurred last week on the Eastern Telegraph Company's cable ship "John Pender," the captain, 18 officers, engineers, and members of the crew being attacked. Fortunately, when symptoms of acute gastro-enteritis developed, the captain and certain of the officers, having a knowledge of first-aid, were able to deal with the trouble to a certain extent, and this undoubtedly helped the sufferers. Dr. F. M. Williams, the port medical officer of Plymouth, and Mr. F. W. Weale, port sanitary inspector, visited the ship, and all the victims are now making satisfactory progress.

The Anthrax Investigation Board.

A meeting of the Anthrax Investigation Board was held last week at the offices of the Bradford Chamber of Commerce, Mr. John E. Fawcett presiding. Dr. Eurich reported that since the last meeting of the Board on May 3rd four cases of anthrax had occurred, two in Bradford and two at Halifax. All were of the external variety, and all the patients recovered. In each case anti-anthrax serum had been injected. During the same period 264 samples of wool and hair had been tested for anthrax, with the result that anthrax spores were found in twenty-one instances. Experiments with disinfectants were being carried on, but were not complete. It was reported that representations had been made to the exporters of alpaca from Chili and Peru as to the desirability of taking precautions with a view to the risk of anthrax being reduced to a minimum. These representations had been well received, the senders undertaking to do all they could to assist in the direction indicated.

Hospitals Association's Conference.

The British Hospitals Association will hold its annual conference in Birmingham on September 19th and 20th. It is expected that between 150 and 200 delegates will attend. A reception will be held at the Council House by the Lord Mayor on the opening day, and visits will be paid by the delegates to several hospitals in Birmingham and the district. Papers have been promised by Sir William Collins, M.P., M.D., and Mr. J. Danvers Power, by Mr. E. S. Kemp on "The Training of Almoners," by Dr. Nathan Raw on "The Insurance Act," and by Dr. Josiah Oldfield on "The Site and Size of a Hospital in Relation to its Efficiency."

University of Oxford.

At a Congregation held on August 8th the following degrees were conferred:—

D.M.—J. S. C. Douglas, Christ Church; P. H. C. Fowell, St. John's.

B.M.—D. P. McDonald, Oriel; P. L. Gibson, Trinity.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Original Articles on Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Mr. Alan Jacob (Redditch).—The hospital ship *Maine* is as completely equipped as any naval hospital on shore. She has four main wards, in addition to a ward for infectious diseases, an operating theatre, and an X-ray room. Her war accommodation is 180. She is one of the Royal Fleet Auxiliary vessels, owned by the Admiralty, and she is under the command of Capt. Malcolm Tarver.

M.D.Baux (London, N.).—Mountain sickness is not wholly the result of atmospheric conditions, its production being also influenced by the state of the nervous and digestive systems. Even such factors as chill and snow glare are included by such experienced climbers as Dr. A. M. Kellas.

WEAVERS' COUGH.

In reply to a question the other day in the House of Commons, Mr. McKenna stated that he had received a report from the factory inspector upon the cases of certain weavers in a Burnley factory who were attacked by an unusual cough which affected their breathing. The ventilation in the shed in question was good. Expert opinion was that the outbreak was due to some mouldy sago in the "size" used in dressing the warps, causing mildew in the shed. The mill was closed and thoroughly disinfected, and measures were taken to prevent the development of mildew, the warps being damped with a solution of carbolic acid, with the result that a decided improvement had occurred.

Dr. R. E. (Exminster).—Communication and enclosure received with thanks.

Dr. F. H. J. (Darlington).—MS. duly received which has been marked for early insertion.

THE FISH SUPPLY OF LONDON.

The clerk of the Fishmongers' Company reports that last month 19,181 tons of fish arrived at Billingsgate Market. Of that quantity 13,581 tons came by land and 5,600 tons by water. The Company's officials seized and destroyed 305 tons as unfit for human food. The principal seizures were of haddocks (97 tons), whiting (90 tons), plaice (25 tons), skate (24 tons), shrimps (14 tons), catfish (10 tons), periwinkles (seven tons), and whelks (six tons).

"Anthropologist" (Stafford).—It has been shown quite recently that the candidates for conscription in Denmark have increased 1½ inches in average height during the past fifty or sixty years. A similar increase has also been noted in Norway, Sweden and Holland.

Mr. P. R. (Bridgetown).—The presence of small quantities of manganese in animal tissues is a known scientific fact. In addition, minute traces of boron have been found by MM. Gabriel Bertrand and H. Agulhan, amounting to about one milligramme for seven kilogrammes of muscle.

Appointments.

Duff, Donald, F.R.C.S.Edin., F.R.F.P.S.Glasg., Assistant Surgeon to the Glasgow Royal Infirmary.

Hughes, F. M., M.R.C.S., L.R.C.P., Assistant House Surgeon to the Poplar Hospital for Accidents.

Johnson, H. E., M.B., Ch.B.Edin., Medical Officer for the Callington District of the Liskeard Board of Guardians.

Messiter, Cyril C., L.M.S.S.A.Lond., Junior House Surgeon and Anæsthetist to the Croydon General Hospital.

Vining, C. Wilfred, M.D., B.S.Lond., M.R.C.P., D.P.H., Assistant Physician to the Leeds General Infirmary.

Yule, George Pratt, M.D.Edin., Medical Officer of Health of the County of Fife.

Vacancies.

County and City Asylum, Powick, Worcester.—Junior Assistant Medical Officer. Salary commencing at £160, with board, etc. Applications to Medical Superintendent.

St. Bartholomew's Hospital, Rochester.—Resident House Physician. Salary £110 per annum, with board, residence, and laundry. Applications to Charles Speyer, Secretary.

West Berks United Districts.—Medical Officer of Health. Salary £530 per annum, with an allowance of £330 per annum for travelling, office, and other expenses. Full particulars and forms of application of Bromley Challenor, The Guildhall, Abingdon.

Children's Hospital, Temple Street, Dublin.—Assistant Physician. Applications to Hon. Secretary.

Salop Infirmary, Shrewsbury.—House Surgeon. Salary £150 per annum, with board, washing, etc. N.B.—Ladies not eligible. Applications to Joseph Jenks, Secretary.

Portsmouth Borough Asylum.—Assistant Medical Officer.—Salary £150, with annual increments of £10 to £200, with board, lodging, etc. Applications to the Medical Superintendent on or before August 31st, 1912.

Govan District Asylum, Crookston, near Paisley.—Second Assistant Medical Officer. Salary begins at £150 per annum, with board, laundry, etc. Applications to the Medical Superintendent as soon as possible.

Queen Mary's Hospital for Children, Carshalton, Surrey (under the Metropolitan Asylums Board).—Assistant Medical Officers (three vacancies). Salary £150 per annum, rising £10 annually to £180, with board, washing, etc. Forms of Application of the Clerk to the Board, Embankment, London, E.C.

Devonshire Hospital, Buxton.—Assistant House Physician. Salary £100 per annum, with board (excepting stimulants), and laundry. Applications to be sent in at once.

West Riding of Yorkshire.—Tuberculosis Officer to assist the County Medical Officer in matters arising out of the administration of the National Insurance Act, 1911, in respect of Sanatorium Benefit. Salary £500 per annum. Further particulars will be furnished on application to F. A. Darwin, County Hall, Wakefield.

Somerset County Council.—Tuberculosis Medical Officer. Candidates must have held hospital appointments and be specially experienced in the diagnosis and treatment of tuberculosis and in the use of tuberculin. Salary £500 per annum. Applications must be sent to G. I. Simey, Sidney House, Boulevard, Weston-super-Mare.

Wilts County Council.—Tuberculosis Officer, who will have charge of the Tuberculosis Dispensary and Branches. Salary £500 per annum. Applications must be made on forms to be supplied. Apply to R. W. Merriman, County Offices, Trowbridge.

Births.

Herrick.—On July 26th, 1912, at Kasauli, India, the wife of Lieut. R. de S. B. Herrick, I.M.S., of a son.

Kaye.—On Aug. 11th, at Eaglestone, Strathpeffer, the wife of Henry Wynyard Kaye, M.D., Oxon., of a son.

Maidlow.—On Aug. 15th, at Ilminster, Somerset, the wife of William H. Maidlow, M.D., of a son.

Marriages.

Baxter—Everitt.—On Aug. 14th, 1912, at St. Andrew's, Wells Street, Staff-Surgeon Charles T. Baxter, Royal Navy, youngest son of the late Alexander B. Baxter and Mrs. Baxter, of 430 Camden Road, N., to Margaret Louise, only daughter of Mr. and Mrs. Frank Everitt, late of 1 Dunsford Place, Bath.

Tunnicliffe—Philo.—On Aug. 10th, at Holy Trinity, Marylebone, Francis Whittaker Tunnicliffe, of 129, Harley Street, and The Littens, Hampstead, Norris, Berks, to Minnie Gertrude, daughter of William J. Philo, of Dovercourt, Essex.

Deaths.

Dobbyn.—On Aug. 12th, at Walmer, very suddenly, John Stephen Dobbyn, M.D., F.R.C.S., of Streatham, late Deputy Inspector-General, R.N. (retired), aged 73.

Haig-Brown.—On Aug. 10th, at St. Leonards-on-Sea, Hope Margaret, the wife of Clarence William Haig-Brown, M.D., Charterhouse, Godalming.

Hallowes.—On Aug. 15th, at Ulverstone, Tasmania, Herbert Chaworth Hallowes, M.D., second son of the late Reverend Brabazon Hallowes, of Glapwell Hall, Chesterfield, in his 56th year.

Hutt.—On Aug. 13th, suddenly, at High Road, Tottenham, Charles Edward Hutt, M.R.C.S., L.R.C.P., aged 47 years.

Moffat.—On Aug. 10th, at Viewforth, St. James's, Cape Colony, South Africa, Hilda, the beloved wife of Dr. Robert Unwin Moffat, C.M.G., and youngest daughter of the late James and Helen Vavasseur, of Knockholt, Kent.

Shepherd.—On Aug. 12th, at 50 Kedleston Road, Derby, H. D. Shepherd, M.B., F.R.C.S.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, AUGUST 28, 1912. No. 9.

NOTES AND COMMENTS.

A Wet August and the Public Health. THE pitiless rains which have marred the pleasure of so many holiday-makers during the present month, and have spelt consternation and even ruin to agriculturists, have not been wholly disadvantageous. From all quarters we learn that the high infantile mortality usually attributable to the epidemic diarrhœa prevalent during periods of drought and heat has been conspicuous by its absence. The amount of dust, laden with death-dealing germs, has been also practically negligible, neither has there been anything like the number of flies about to fall into the domestic milk-jug or to upset journalistic equanimity. Those sensations of lassitude and of "wanting a holiday" are soon dispelled when the thermometer cannot be induced to rise much over 60 degrees and the atmosphere is saturated with moisture. With distrust of the barometer begotten of past experience of its vagaries arises a feeling of secret joy that we are still in the old place and doing the same old things. What does it signify if we suffer a few more twinges of neuralgia or of rheumatism? Have we not the assurance of vital statistics that the effects of the diminishing birth-rate have been, to a certain extent, counteracted during the August of 1912 by lessening the customary seasonal massacre of the innocents? Such is Nature's great law of compensation.

The Passing of General Booth. BY the death last week of the veteran leader of that unique organisation known as the Salvation Army, one of the most notable personalities of the present age has been removed from our midst. The movement initiated in 1865 by the Rev. William Booth, D.C.L. Oxon., to give him his official, but less homely, title, though primarily religious in its aims and objects, was also deeply concerned with the physical betterment of the "submerged tenth," towards the reclamation of which class of society its energies were, from the first, specially directed. That this champion of the outcast and degraded had a keen, practical insight into the methods of social reform is seen by the success of the multifarious schemes outlined in his famous pamphlet, "In Darkest England, and the Way Out," which appeared in 1890. In spite of the fiercest opposition experienced by the founder of the Salvation Army in its early days, he lived to see many, if not all, of the institutions that he devised for the relief of the suffering poor in a prosperous and flourishing condition. What is more, the truly imperial and international character of his work is universally acknowledged, not only by the evangelist, but also by the humanitarian and the statesman in all quarters of the globe. The establishment of shelters for the homeless, food depôts for the starving, day nurseries for destitute children, and homes for the reception of drunkards, are only a few of the philanthropic schemes inaugurated by General Booth that have had a directly beneficial effect upon the public health.

The Title "Doctor" and Secret Remedies. A GOOD deal of work remains before the Select Committee upon Patent Medicines and Secret Remedies and Appliances can furnish a comprehensive report of the subject. Among the host of chicaneries by which the trade is maintained it may be fervently hoped that some witness will point out the abuse of the title of "Doctor" whereby the proprietors of nostrums deck their wares with the semblance of scientific authority. The Dr. Turner Company, of Great Portland Street, London, furnishes a case in point. It appears that Dr. Turner is a real personage, but the *Journal of the American Medical Association* denies that he holds any licence to practise medicine. A long list of secret remedies, some of them redolent of blatant quackery, could be detailed, in which a medical title appears in the description. In one or two cases the name of some illustrious deceased medical man has been profaned by the advertisement of some pill or potion claiming to cure a host of maladies. In all the long range of callous disregard for the decencies of life there is hardly one that for mean and cynical cunning can compare with this offence against the reputation of the dead. Of a somewhat similar nature is the quotation from the books of medical writers, living or dead, in the advertisements of claims that are from a scientific point of view no less monstrous than misleading. We venture to express a hope that the Committee will deal with these and other abuses tersely and thoroughly. It is curious that the General Medical Council should not long ago have used their influence with the legislature to put an end to the unauthorised advertisement of medical titles, real or fictitious, by the proprietors of nostrums and patent medicines.

Out-Patients and Fees. THE report of the King Edward's Hospital Fund Committee, briefly stated, is that only a few well-to-do people, able to pay ordinary medical fees, take advantage of the out-patient departments of hospitals. Before accepting that conclusion, we should require a full statement of the way in which evidence as to facts had been collected and sifted. It is hard to imagine a case in which it would be more difficult to get pertinent and trustworthy evidence than on that of alleged hospital abuse. It is to the interest of hospital authorities to make light of the whole matter, and, obviously; it is unlikely that any well-to-do persons, even if caught in the act, will admit that they have abused the charity; nor can one readily see how their good faith is to be tested. On the other hand, more or less evidence leaks out from time to time and comes into the possession of the honorary surgeons or physicians, especially in the special hospitals where small fees are payable by patients who can afford them. An amusing instance of this kind of abuse was brought to our notice some time ago. A patient had been under treatment and had been in the habit of paying a small sum at each visit. Later, for some reason or other, he consulted a Harley Street specialist, whose fees for a course of vaccine treatment and injections of salvarsan amounted to a good round sum, which was paid without hesitation. The specialist paid this hospital patient a visit at his own house, a large abode furnished in sumptuous fashion with a bedroom suite that must have cost 50 or 60 guineas at the least. The King Edward Fund report on the other hand says there is in out-patient rooms a large class of people quite able to pay fees higher than the average small medical fees. What practical step does the Fund suggest in order to deal with this class? Are we to be taken back to the old principle of paying patients which has always been favoured by the King Edward and Metropolitan Hospital Sunday Funds?

LEADING ARTICLES.

SEASIDE RESORTS AND HEALTH.

THE annual summer exodus to the seaside naturally brings to the professional mind the sanitary aspects of the seaside resorts which his patients, and haply he himself also, may elect to patronise. From time to time, rumours of a disquieting nature reach the world through the medical or lay journals with regard to this or that sanitary defect in more or less fashionable and popular watering places. Outbreaks of enteric fever occur from time to time, usually through some fault in the water supply. Many of our readers will be able to recall the case of a large seaside town on the south coast which has never regained its prosperity after an experience of this kind. In spite of such warnings the water supply of certain resorts is still notoriously bad, and it would be possible to mention an important town depending upon summer visitors for a substantial share of its prosperity where the water supply of a considerable part of the central district is derived from ancient wells. Then, again, the house and general drainage system of many seaside towns is, to say the least of it, unsatisfactory from the point of view even of a low modern sanitary standard. Towns on the seaboard are in many instances necessarily built upon a low level, and the main drainage is discharged upon the shore in the intervals between high tide. Owing to imperfect sewer ventilation a common result is that twice in the twenty-four hours there is a strong backward pressure of sewer-gas which, in scores of well-known seaside places we have visited, has been rendered patently manifest to the senses in the house lavatories. Indeed, were a systematic investigation to be conducted into the drainage and the water-supplies of our chief seaside towns results would probably be of a more or less sensational nature. It is surprising, indeed, that local authorities should acquiesce in a short-sighted policy which admits of lax and low standards in sanitary matters. As a matter of fact, the expenditure in such places on foreshore construction and maintenance is often large and the inhabitants are saddled with heavy rates. That fact, although it partly excuses, does not justify the apathy of municipal sanitary administration, which is part and parcel of the existing system, which places local government in the hands of a handful of persons whose interests are often directly opposed to sanitary reforms, and against whose tacit resistance the power of the medical officer of health, however zealous and efficient he may be, becomes practically a dead letter. How otherwise could one account for the absence of any machinery for isolation and disinfection in one of the largest and best known of the watering-places in the West of England. In this case we believe that the energetic protests of a local physician resulted a few years ago in the addition of this primary essential to the health defences of the district. Some towns are specially favoured by unqualified medical practice as in the case of a leading Sussex resort in which a branch of the notorious Viavi remedies has been conducted for several years, and its advertisements exhibited on the public tramcars. In short, there appears to be an extraordinary lack of business management on the part of the local authorities of British watering-places due, apparently, to some peculiar trait in the national character. The result is seen in the numbers of our countrymen and countrywomen who throng the Continental spas and pleasure resorts. After all, the British watering-place is in the main of entirely modern growth, and we may hope without any undue stretch of the imagination that one day it will attain a standard of administration worthy of the best teachings of modern sanitary science. It may be safely assumed that in no other way is any particular health resort likely to be placed on a permanent basis of prosperity. The average seaside watering-place of to-day is infinitely better in every way, not less from the social than the sanitary standpoint, than that of half a century ago, so far as the visitor is concerned. In many of these places, however, there is still room for improvement. The chief directions in which such expansion is likely to take place lie probably in the adoption of the most advanced standards of public health administration and the removal of a number of regulations that are hardly in touch with latter-day tendencies, many of which seem framed to discourage rather than to encourage the subsequent return of summer visitors. From the public health point of view the sanitary supervision of seaside towns is of sufficient national importance to merit specially close attention from the Local Government Board.

CURRENT TOPICS.

Overpopulation.

In these latter days when there is so much discussion on Eugenics—writ large and in capital letters—and on National Insurance—similarly emphasised; when this man proposes drastic measures of dealing with the unfit, warranted, in his opinion, to produce a perfect race in record time, and that man imagines the robbing of Peter for the payment of Paul a panacea for impoverished humanity, it is wise to reflect on the fundamental principles underlying modern social conditions. Careful retrospection would often prevent us from instituting elaborate processes of dealing with effects whilst we ignore causes, or, on the other hand, from wasting our resources in attacking an impregnable fact fundamental in our being, whilst we might be better employed in rightly directing its applications. Regarding the economic history of mankind we are confronted with the fact that with the increase in food amongst civilised peoples there is a corresponding increase of population, and when the lean years arrive there is the inevitable local starvation and annihilation of a certain proportion of the people. When famine rages in India or China it is to be doubted whether the rest of the world could afford bread to feed the starving multitudes, not because of lack of money or inclination, but from lack of food. In fact, a certain percentage of every society is in constant want of proper nutriment. Were even every available acre of the earth under cultivation, in due proportion there would be more individuals dependent on the crops thereof, and always that percentage of the inefficient few, who could not obtain sufficient sustenance. The army of prosperous workmen has always the inevitable accompaniment of needy camp-followers. As in Germany to-day, immense commercial prosperity is burdened by huge numbers of unemployed, who "actually slaughter horses and dogs for food to sustain life." A suggestive paper in the New York *Medical Record* of August 10th points out that America, which for years furnished an outlet for the excess of European populations, is gradually presenting the same conditions that obtain in the parent countries. Social adjustments and economic settlements can avail little as long as men persist in reproducing beyond the resources of the soil. *Let* the morally and mentally dead bury their dead. The fit *will* survive.

Mortality Among Coal Miners.

The Blue Book issued by the Chief Inspector of Mines on Saturday last contains the mortality statistics of coal miners during last year. It seems evident that if the deaths from accident could be eliminated, the lives of miners would be practically as "good" as those of average men in other trades. The number of lives lost last year, although marking a slight reduction over the record of the previous year, is still high. The total number of persons employed in and about the coal mines was 1,067,213, and there were 1,265 fatal accidents. This marks a decrease of 510 in the number of deaths compared with 1910; but in the higher total there are included 480 deaths attributable to the Whitehaven and Hulton disasters. The total number of non-fatal accidents during 1911 which disabled for more than seven days was 166,153, involving injury to 166,616 persons. This is an increase of 7,574 in the number of the injured when compared with the preceding twelve months. The death-rate of the underground workers in the coal mines was 1.29 per 1,000 persons employed, as against 1.91 in 1910; and the death-rate of the surface-workers was .73 per 1,000 employed, as against .76 in the previous year. The death-rate of the underground and surface workers as a whole was 1.19, as against 1.69 in 1910.

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better than the societies gave them before the Act." Another extract is in the form of an anonymous letter to the *Standard*, headed, "The Lunacy Acts: A Strange Case." In this what amounts to a charge of conspiracy wrongly to obtain paltry fees is made against members of the profession. "The Lunacy Acts endanger the liberty and destroy the lives of the poor and enrich the pockets of some medical men who are willing to take advantage of the fees they can so easily earn." This grave charge is supported by the narrative of a case which, we venture to affirm, would not bear investigation. If true it would have been necessary merely to state the facts properly authenticated, without the addition of vile imputations. The sole point our correspondent wishes to emphasise is, however, that the more the confidence in the medical profession is shaken among the poor and ignorant, the more flourishing becomes the trade of the nostrum monger and blatant, impudent quack, from whose advertisements philanthropic newspapers derive so large a part of their incomes. Although the column or more of obscene quack advertisements, which up to lately was always to be found in one London popular weekly organ, seems now to have been struck out, it is not noticeable that the number of quack advertisements of any kind has much diminished in any of the papers since the publication of enlightening portions of the evidence before the Select Committee on Patent Medicines and the issue of the second series of "Secret Remedies."

to be taken back to the old principle of paying patients which has always been favoured by the King Edward and Metropolitan Hospital Sunday Funds ?

LEADING ARTICLES.

SEASIDE RESORTS AND HEALTH.

The annual summer exodus to the seaside naturally brings to the professional mind the sanitary aspects of the seaside resorts which his patients, and haply he himself also, may elect to patronise. From time to time, rumours of a disquieting nature reach the world through the medical or lay journals with regard to this or that sanitary defect in more or less fashionable and popular watering places. Outbreaks of enteric fever occur from time to time, usually through some fault in the water supply. Many of our readers will be able to recall the case of a large seaside town on the south coast which has never regained its prosperity after an experience of this kind. In spite of such warnings the water supply of certain resorts is still notoriously bad, and it would be possible to mention an important town depending upon summer visitors for a substantial share of its prosperity where the water supply of a considerable part of the central district is derived from ancient wells. Then, again, the house and general drainage system of many seaside towns is, to say the least of it, unsatisfactory from the point of view even of a low modern sanitary standard. Towns on the seaboard are in many instances necessarily built upon a low

anatomical and experimental facilities at our disposal before advocating universal adoption of a new anæsthetic method.

The Awakening of China.

In our issue of August 7th, a brief notice was given of the career of Dr. G. E. Morrison, who, after serving for many years as correspondent of the *Times* at Peking, has lately been appointed to a position which, although not yet designated by a specific title, is understood to be that of confidential adviser to the Chinese Government. Dr. Morrison is now in England, and to the *Times* of Friday last he contributes an extremely important letter on the present position and future prospects of the new Government. There hardly exists any authority on Chinese affairs whose opinions can carry more weight. He takes an optimistic view. He believes, in short, that there is going on a real awakening among the people of China, and states solid facts to establish his statement. For instance, he points to the change that has taken place in the administration. Under the old *régime* no man could hold office in the province of his birth; now most officials are natives of the provinces in which they are serving. The interests of the province are thus better served than under the old system, when officials had as their main object the amassing of the largest fortune in the shortest time. For the first time the people who pay the taxes have a voice in the expenditure of their taxes. Dr. Morrison points out that these changes have involved the re-casting of the whole internal machinery of government, and urges that the comparative smoothness with which it has been effected inspires hope in the future of the country. The awakening of China cannot fail to prove an epoch-making fact in the history of the world. With the broader issues involved medical journalism has little to do. It will, however, have some effect upon the medical profession. At present the vast population lives practically without the aid of scientific medicine and surgery. We are already hearing of a growing demand for doctors with European qualifications, and there can be no doubt that until an adequate supply of Chinese medical men can be educated, there will be room for a large number of foreign practitioners, besides professors and teachers in colleges and medical schools. It would be most valuable if Dr. Morrison could supply us with information on this subject, and we venture to submit the suggestion to him.

Measles in Stepney.

In his recently-issued annual report, Dr. Thomas, Medical Officer of the Borough, publishes some remarkable statements with regard to the prevalence of measles in Stepney. Last year the number of deaths amounted to 291, the highest on record in the history of the borough, exceeding the average by very nearly 30 per cent. In the past twenty-two years there have been 4,398 deaths from measles, an average of just 200 per annum, and the excess of 91 recorded last year forms a somewhat startling fact. Comparing the havoc wrought by measles with the mortality from other diseases, Dr. Thomas points out once more that the deaths from this one cause amount almost to as many as those from scarlet fever, diphtheria, and typhoid fever combined; and he emphasises the fact that the harm done by measles is not measured alone by the number of deaths; when not fatal, it often leaves behind the seeds of future trouble, such as retarded growth and defects of hearing and sight. Dr. Thomas seems inclined to the opinion that steps should be taken for the segregation of children when once the symptoms of the disease have made their appearance. Measles may be said to be virtually a harmless and rarely mortal disease among the wealthy and well-to-do. Dr. Thomas does not seem to have alluded to the fact that in places like Stepney, poverty, bad housing, and the innocent ignorance of poor mothers in all that concerns the proper care of young children, need always to be considered as potent factors in causation of child mortality.

The Health of the Navy.

On many occasions during late years, in discussing problems of health in the Navy, and especially with regard to the relatively large number of phthisis cases, the question of ventilation in the modern warship has been touched upon in these columns. The whole question was ably dealt with by Fleet-Surgeon C. Marsh Beadnell at the last Health Congress in a paper which we are now glad to see is published as a pamphlet. It seems evident that the designers of our men-of-war have directed their attention too closely to the construction of fighting machines, and have thought too little about the health and stamina of the crews, whose efficiency forms the prime necessity for the successful working of these machines. Without forced draught the allowance of air per man in a modern battleship is stated to be often as low as 86 cubic feet, whereas in barracks the soldier is allowed 600 feet. The remedy is, of course, to be found in artificial ventilation. In active service during war, as was found in the Japanese navy in the late war with Russia, compartments and hatches may have to be kept closed for long periods. To the foul air thus prevailing below the Japanese surgeons ascribed a great deal of the sickness, including dysentery, among their crews in the fleet off Port Arthur. The difficulties in the way of warship ventilation are, however, not insurmountable, and in the newer Dreadnoughts vastly improved conditions are expected. In these ships air will be passed through tanks containing steam pipes, the steam being under pressure. The effect of this will be to dry the air as well as to warm it, and therefore the men will not be tempted to plug up the ventilating louvres, which, as usually fixed, give rise to disagreeable draughts. As regards food, Fleet-Surgeon Beadnell thinks that the diet of the average sailor is perhaps too liberal, and the same view was expressed two years ago by Admiral Moresby.

Arsenic and the Menstrual Function.

The affinity between the organic and the inorganic is never so well illustrated as in the chemical analysis of the various fluids and tissues of the human body. The localisation of certain metallic bases to special organs and fluids serves a specific purpose, though the reasons for such distribution have not as yet been fully explained in all cases. The existence of arsenic in the menstrual fluid was demonstrated by Gautier, who found that an average of 0.15 mg. is excreted at each menstrual period. It is even more surprising to note that the presence of minute quantities of arsenic in the uterine endometrium during menstruation has been shown by Drs. I. and J. Ries (*a*), who obtained positive results with the Marsh and Gutzeit tests. Immediately after the flow the arsenic is lacking, but it reappears later in the interval, being present in greatest amount just before the onset of menstruation. No arsenic was discovered in the uterine mucosa of a woman of sixty-five. The theory of the investigators is that the metal, small quantities of which are taken in with the food, is stored up in the uterine glands, and is discharged in the mucoid secretion of the pre-menstrual stage. It is suggested that the arsenic received in this manner in childhood is utilised in the building up of the body tissues, but that at the age of puberty some excess has accumulated. The uterine glands then commence activity, storing up the arsenic until sufficient concentration has taken place for it to act as a poison, consequently the discharge occurs. These interesting experiments are not intended to be a conclusive explanation of the complex phenomenon of menstruation, though they are most suggestive.

PERSONAL.

H.M. the King has been graciously pleased to appoint Major James Davidson, M.D., of the Indian Medical Service, to be a Companion of the Distinguished Service Order in recognition of his services in connection with the recent operations against the Abors on the North-Eastern Frontier of India.

Major M. H. G. Fell, R.A.M.C., has been appointed to be a Deputy Assistant Director-General at the War Office.

Major W. Selby, I.M.S., has taken up duty as Principal and Professor of Surgery at King George's Medical College, Lucknow

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(*a*) *Münch Med. Woch.*, 1912, lix., 1084.

A CLINICAL LECTURE

ON

SELECTING THE ANÆSTHETIC. (*a*)

By J. D. MORTIMER, M.B., F.R.C.S.,

Anaesthetist, Royal Waterloo Hospital, Throat Hospital (Golden Square), St. Peter's Hospital, &c., Instructor, Medical Graduates' College.

It is by no means unusual for an anæsthetist to be asked, "Are you in favour of ether or chloroform?" or "What are you going to give?" If he replies, "Sometimes the one, sometimes the other," or, "I do not know until I have examined the patient," his answer evidently causes some surprise. It may even happen that the surgeon or practitioner concerned will urge the employment of an anæsthetic or of a method from which the anæsthetist cannot under the circumstances expect satisfactory results.

The selection of an anæsthetic suitable to the patient and to the operation is, however, a very important part of the anæsthetist's duty, and in the hope of causing this fact to be more generally appreciated this lecture is now given.

The following are the chief points which have to be borne in mind: the safety of the patient, immediate and remote; the patient's condition, general and local; the nature and probable length of the operation; the position; the experience of the administrator: secondary considerations are such as the ease of administration and the portability of apparatus. During an operation the anæsthetic or method may have to be changed in accordance with the state of the patient or the surgical proceedings.

It need hardly be said that the welfare of the patient is the prime consideration, but this is often regarded in too limited a sense—*i.e.*, with the view of guarding against an immediate fatality, but without much heed to other possibilities. For instance, if ether be given from an inhaler to a stout emphysematous person for a prolonged abdominal operation the net result is not creditable when, although the patient is alive at the end, she is in a semi-asphyxiated condition with a probability of broncho-pneumonia following—to say nothing of the impediments and delay which are likely to have disconcerted the surgeon. No doubt if the administrator be inexperienced he will be wise to choose his anæsthetic mainly on the ground of immediate safety, or perhaps to select one with which he has more familiarity than with others; but I venture to say that it is only in emergencies that such a one should undertake the task at all—especially when the state of the patient or the proceedings of the surgeon are likely to cause complications; and there is always the risk that he who is not accustomed to giving anæsthetics may regard as a simple case one in which an experienced administrator would foresee considerable difficulties and dangers. I would remind you that avoidable disasters may (apart from other considerations) put the administrator in a very awkward position from a medico-legal point of view.

It will save repetition if we consider the question of safety, the state of the patient, the proposed operation and position, with reference to those anæsthetics which are commonly used.

Nitrous-oxide (N_2O).—This is usually indicated for short operations, and in all but exceptional instances is free from danger and without any after-effects. It is not, however, satisfactory when stiffness or jerking would interfere with the operation as in tenotomy—nor when pain from the operation is likely to persist for some minutes. Children are apt to be frightened by the apparatus; the available period of anæsthesia in them is very short, and may be accompanied by micturition or defæcation, or followed by sickness. In the anæmic insensibility is also very transient after removal of the face-piece, although "sandwiching" air during induction will slightly prolong it.

Nitrous-oxide is risky in advanced pregnancy and dangerous in two conditions: (1) In which there is respiratory difficulty, especially if this be due to swelling, which will be made worse by venous engorgement—*e.g.*, faucial abscess; (2) in which there is already obstruction to the circulation or enfeeblement of the heart as in mitral stenosis, in the "Munich-heart" of beer-soakers, in elderly people with chronic bronchitis and emphysema. Nitrous-oxide and oxygen is better suited to such patients, and it may also be used in others to avoid rigidity and jactitation and prolong anæsthesia. Prolonged nitrous-oxide and oxygen has been recommended for diabetics (to avoid coma) and in cases of exhaustion (to avoid shock). It is, however, difficult for even an expert to maintain a level anæsthesia free from rigidity and sickness—which are, of course, objectionable in abdominal operations especially. Nitrous-oxide is often useful to start the anæsthesia in nervous patients, as it is not unpleasant to take and consciousness is quickly lost.

Ethyl-chloride (E.C.).—This also gives a short anæsthesia, but slightly longer than nitrous-oxide. Usually there is general relaxation, which is an advantage to the operator. Recovery is not so rapid and there is more liability to headache, confusion and sickness. Although fatalities are rare, it is unquestionably less safe than nitrous-oxide, lowering the blood-pressure and causing early abolition of the palatal and laryngeal (cough) reflexes, and if a sudden inspiration be taken or if a re-application be made there may be much respiratory spasm. It should therefore be used with caution in operations about the throat and in weakly subjects. It is not recommended for muscular adults, especially alcoholics; for, besides other risks, they are apt to be unmanageable and pugnacious when recovering. For longer operations it has no advantages.

Ether.—It may be said in general terms that for any operation of more than momentary duration this should be given, provided there is no contra-indication. For a comfortable and speedy induction it may be preceded by N_2O or E.C. In emergencies, when skilled assistance is lacking, it is best to put the patient fully under ether when not contra-indicated; much may be done in safety before consciousness returns.

Discussion of the method—whether "open" or by inhaler—hardly falls within the scope of this lecture, except for the reason that lately the former has been highly recommended by some for all

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(*a*) Lecture delivered at the London Polyclinic Post-Graduate College.

kinds of operations, and especially for abdominal ones. It is largely used in the United States; to some extent for the reason, as I am assured by American practitioners, that skilled anæsthetists are not so usually employed as in this country, the anæsthetisation even in hospitals being often conducted by a student or perhaps a nurse. Surgeons have objected to the use of an inhaler on the ground that cyanosis, cough, and exaggerated breathing are harmful to the patient and inconvenient to the operator, particularly in abdominal work, besides causing ill-effects afterwards. But in suitable subjects and with a competent anæsthetist these troubles should not occur. In any case it need hardly be said that the apparatus should be clean, and the face-piece should be frequently removed and the bag emptied. The "open" method has certainly this advantage, that it may be given with immediate safety and probably without great difficulty by those who have no special skill or experience—but those who can attain equally good results by more convenient and effectual methods will hardly be inclined to discard them entirely in its favour. Apart from this, the "open" method is extremely valuable in cases of exhaustion and shock. Oxygen may be given in combination.

Ether should not as a rule be given to infants and young children, in whom it excites much mucous secretion which may embarrass breathing or go on to bronchitis. Elderly people do not usually take it well on account of the degenerated state of their respiratory and circulatory systems. Patients who are fat and full-blooded, heavy smokers, and people whose mouths and throats are in an unhealthy state, are likely to cough and secrete much mucus; if the operation be long, cyanosis and other respiratory troubles will occur, which are not only objectionable at the time but may lead to bronchitis or broncho-pneumonia, particularly if the operation or the bandages interfere with coughing and clearing the lungs afterwards. It is contra-indicated when any respiratory disorder already exists, and is not usually the best anæsthetic when this function is affected by the patient's position during operation. The addition of oxygen does not annul ill effects in unsuitable subjects.

For operations about the nose and throat, ether has the advantage that the sitting position is permissible. On the other hand, vascular engorgement and mucous secretion may interfere with the surgeon's work. This is also the case in such operations as removal of cervical glands.

For abdominal, renal, and mammary operations ether may be given to some patients with advantage, but in a large proportion it will be found better to change after induction to a chloroform-ether mixture (C.E.) or to chloroform, or to give such from the beginning, for the reasons already stated. After operations on the kidney and in the upper part of the abdomen there is, as was shown by Dr. Pasteur (Medical Society of London, 1911), inhibition of the action of the diaphragm, which may lead to basic pulmonary collapse, and this again may go on to broncho-pneumonia. Ether is not, as was formerly supposed, the direct or sole cause of this disorder, but it may be an indirect or contributory cause, and should therefore be avoided or used with caution when there are other unpreventable factors.

In operations where much hæmorrhage is possible, as in those on the thyroid, I am doubtful whether the advantages in lessening shock may not be counter-balanced by increased loss of blood and over-stimulation of the heart.

Ether, and ethyl-chloride, must not be used, especially by the open method, if a cautery or lamp has to be brought near the patient's face.

Chloroform can be best taken by robust patients in early life and old age and by healthy women during parturition. However, infants, children, and pregnant women have not, as was formerly thought, any special immunity; although the usual absence of degenerative changes may enable them to be rescued from perilous conditions without much difficulty. It is a convenient (sometimes an essential) anæsthetic for operations about the nose, mouth and larynx, and in some respiratory disorders. The sitting position ought not to be adopted, except for special reasons, and when the administrator and operator are experts. It is particularly dangerous in dental operations. On the other hand, it may be given with more than usual confidence if the Trendelenberg position be chosen. It should not be given when shock is either present or expected, and it must be used with much caution, and combined with oxygen, when breathing is for any reason unsatisfactory.

During the last few years attention has been drawn to the "status lymphaticus" as being one in which chloroform is peculiarly dangerous. Authorities are by no means agreed as regards the possibility of diagnosing this condition during life, and it can only be said that chloroform should be avoided if there be the slightest reason to suppose its existence—indeed, it is a good working rule never to give chloroform except for certain special reasons to anyone unless health is not merely average, but above the average.

The condition which has been called "delayed chloroform poisoning," and is associated with acetonuria, is also unsettled as regards its pathology. Meantime it is well to act upon the rule just given and especially to avoid giving chloroform to diabetic patients, or fat, rickety children, or in acute septic cases, such as appendicular abscess, in which the liver will already have been disordered, and some degree of carbohydrate starvation taken place. Leaving out of consideration this special danger, it is better not to give chloroform to any patient who is from constitutional peculiarity, or from the operation or the disorder for which it is performed, likely to have much after-sickness, for this will probably be thereby intensified.

Chloroform-ether mixtures (C.E.).—These may be regarded as filling the gaps, and as applicable to conditions in which neither ether nor chloroform alone would be altogether satisfactory. The proportions may be varied according to requirements, approaching (open) ether on the one hand or chloroform on the other, but usually two parts of chloroform are combined with three of ether (the old A.C.E. without the alcohol). Such a mixture should be used with the same strict caution as chloroform—that is, it should be renewed frequently and in small quantities with free admission of air, undeviating attention being given to the pupils, colour, pulse, and particularly to the respiration. Given in this way it acts satisfactorily in average or weakly patients near the extremes of life, in the alcoholic and wheezy, in those suffering from various respiratory, cardiac, or abdominal disorders, for abdominal, mammary, and renal operations, and may precede chloroform when this is needed for the nose or larynx, also at the beginning of etherisation for nervous people who object to a face-piece or to the smell of the unmixed ether.

There is much less probability of serious reflex respiratory or circulatory shock on manipulation of the viscera when ether or C.E. is employed than when the patient is under chloroform, and, if this does occur, far less difficulty in restoration. Rigidity is more safely and easily overcome than by chloroform. In my experience, after-effects of C.E. in the majority of cases are absent or slight.

In an article published in the *West London Med. Chir. Journal* (January, 1907) I drew attention to a danger apt to arise during suprapubic prostatectomy—namely, a disturbance of the respiration and of the circulation consequent on distension of the bladder; and also to a difficulty (reflex rigidity of the abdominal and perineal muscles) which may considerably hamper the surgeon during enucleation even under full anæsthesia. With a more extended use of C.E. instead of chloroform I find these troubles seldom occur.

"Mixed" or "Combined" Anæsthesia.—By this is meant the use of a general anæsthesia when sedative drugs have been given previously by hypodermic injection. The method is of value (1) to calm the patient, especially in cases of exophthalmic goitre, or when there is severe pain and shock, and generally in neurotic subjects. (2) To save the anæsthetic and lessen reflex disturbances. (3) To lessen after-pain and restlessness. Morphine or omnopon should be combined with atropine, to get the effect of the latter drug on the cardiac and respiratory functions and on secretion of saliva and mucus. I have found scopolamine to be somewhat uncertain. Here, too, discrimination and caution are needed. If possible, the susceptibility of the patient should be tested beforehand, or the drug should be given in divided doses —otherwise, when the general anæsthetic is added, there may be dangerous depression. The risks are increased when there is much feebleness or lethargy, and in most forms of respiratory, renal, or cardiac disorder, and, I think, liability to after-vomiting and intestinal atony is certainly not diminished.

Spinal Analgesia.—This is indicated for operations on the lower limbs and in the abdomen, especially below the navel, when there is some objection to general anæsthesia, *i.e.* :—

1. Shock, present or expected.
2. Some respiratory affections—*e.g.*, bronchitis.
3. Diabetes.
4. Alcoholism.
5. Operations which set up reflex disturbances (rigidity, etc.) even under deep general anæsthesia.
6. When there have been dangerous effects, or after-effects, such as persistent vomiting, as a result of a former anæsthetisation, if such cannot apparently be avoided.
7. When there is strong objection by the patient to loss of consciousness.
8. In some emergencies, when no skilled anæsthetist is available.

It is contra-indicated by :—

1. Affections of the spinal cord.
2. According to some, by sepsis, and toxæmias such as syphilis; also tuberculosis—there being some risk of meningitis (diminished resistance at site of puncture).
3. Nervous and excitable patients—and usually in conditions such as marked anæmia, cardiac disease, status lymphaticus, old and feeble patients, pregnancy, when any emotional tension may be harmful.

In regard to the last group, combination of light general anæsthesia with spinal analgesia is sometimes very useful—thus obtaining flaccidity and other advantages of the latter without mental shock, whilst the danger of a deep general anæsthesia is also avoided.

Local analgesia may also be combined with general anæsthesia, with the effect of considerably saving the latter and lessening shock, whilst avoiding pain and mental disturbance—for instance, in the operation for deviated nasal septum.

As an illustrative case, I will give you that of a man of 51, requiring removal of his prostate. He was purple-faced and extremely "nervous"; probably a chronic alcoholic. Anæsthesia was induced with C.E. for the reasons already indicated, and then a spinal injection given of .15 gm. novocain. The prostate being small and adherent, enucleation was difficult, but there was no reflex rigidity whatever, although he was so lightly under the anæsthetic that consciousness was hardly lost. Under spinal analgesia alone he would probably have fainted, or interrupted the operation by struggling. Under general anæsthesia alone even a dangerously deep narcosis would probably not have abolished rigidity and shock.

There are methods such as prolonged nasal administration of nitrous oxide or of this with oxygen (for dental operations), and intravenous anæsthesia, which should only be attempted by specialists, so I will not discuss them at length. But, as to the last, I will say that its employment needs very full consideration with regard to all the circumstances mentioned early in this lecture, and that it is by no means so free from difficulties and dangers, nor has it in most instances such great advantages as may have been expected.

Much more might be said, but my time is limited, and your patience cannot be inexhaustible. However, I trust I have made it evident to my audience that a method which may succeed well in one instance may fail badly in another, and that no anæsthetic nor apparatus should be used as a matter of routine. As once truly remarked by Mr. Marmaduke Sheild, "Every case of anæsthesia is a study in itself."

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal The lecture for next week will be by George Grey Turner, F.R.C.S., Newcastle. Subject: "Perforation of the Stomach and Duodenum, with Special Reference to the Early Symptoms."*

ORIGINAL PAPERS.

FRACTURES AT SEA.

By A. G. VAVASOUR ELDER, M.R.C.S., L.R.C.P.LOND.,

Surgeon to the White Star Line.

A FRACTURE has been aptly defined as a solution of continuity. First thoughts would lead one to think that a fracture was a fracture all the world over; to be treated in the orthodox manner to obtain the orthodox result. At sea, however, beyond conforming to the above definition, fractures present a totally different aspect to what they do elsewhere to the practitioner called upon to treat them.

This difference is due to three main points :—

1. Ætiology.
2. Appliances available.
3. Conditions under which appliances are used.

Under the first heading it may be stated that the usual text-book classification of fractures being due to either direct or indirect violence is perfectly true in the main at sea. But the analogy goes no further.

On a ship the factors at work in producing a fracture are totally different from those on land. They certainly give rise to a solution of continuity, but this solution invariably takes place in a part not as described in the books. The logical outcome of this is that an instant recalling of anatomical details is imperative; likewise a departure from the orthodox and academic modes of treatment as far as splinting is concerned, if a satisfactory result is to be obtained.

Primarily, it may be stated that fractures at sea are commonly caused by direct violence, not infrequently by a heavy object falling across or hitting the bone in question. This results in a fracture in a part of the bone which may or may not be typical. It also not uncommonly produces a compound condition to add to the confusion. A few instances of such may serve as illustrations. During a slight gale, a young girl attempted to reach the deck on the exposed or "weather side"—incidentally ladies are notorious in making for the windy side on all occasions—by opening the closed "weather side" door and stepping over a coaming about twelve inches in height. With one foot over the obstacle, she slipped on the wet deck, the force of the gale shut the door violently and she fell inwards, being caught by a chance bystander, with her leg jammed between the heavy teakwood door and the coaming. Result:—A fractured fibula only, about two inches below the head of the bone, and in addition a strain on the external lateral ligaments of the knee-joint. The patient was carried to her berth, and at the outset the fracture was not diagnosed. The "spring of the fibula" was apparently elicited, although it caused great pain. This was attributed to the severe bruising the parts had undergone. It was not until twenty-four hours later, on attempting to put the foot to the ground that acute pain was felt. A fracture was suspected and a more rigid examination of the fibula was made throughout its whole length.

On again trying the "spring," it was elicited so long as both hands grasped the lower fragment, but it disappeared as soon as the upper hand got above the site of fracture. A grating sensation was then felt, and also obtained on passive movement of the foot. The upper half of the leg was encased in a removable plaster splint and the whole put in a McIntyre, in which the patient left the ship. The next voyage the splint was returned to the ship with a note that the result was perfectly satisfactory and that the patient was roller-skating.

Another case with similar ætiology in a stout girl of 17, resulted in a "greenstick" fracture of the middle third of the shaft of the fibula with a chipping of the bone at the site of impact. Diagnosis was only made by X-rays on shore two days after the accident, when a longitudinal crack and a small spicule of bone were clearly defined.

A boy was standing underneath an open hatchway through which baggage was being hoisted on deck on a grating. The rope broke, and the grating fell about twenty feet, catching the boy's leg in the centre. Both tibia and fibula were snapped clean across, the lower fragments presenting through the wound. As this happened in port, first aid only was rendered, and subsequent recovery in hospital was uneventful.

Fractures following upon persons falling or slipping on wet decks during heavy weather are also likely to be atypical. This is due to the angle of the deck and possible obstructions met with in the track of the patient's slide. The following is an interesting case of this nature.

A child, aged 11, slipped along a wet deck and was "brought up" in his slide by a ventilator. When picked up, he was found to have sustained an impacted fracture in the middle third of the right femur. Just when the fracture occurred it is impossible to say, but contact with the ventilator must have impacted the fragments. Under chloroform the impaction was reduced, and the thigh put up in a double-inclined plane splint. A very good result was obtained with practically no shortening.

During a cricket match on deck—a frequent source of casualty—one of the players came into violent collision with a wire funnel-stay and fractured his left clavicle almost in two exact halves.

Another peculiar accident occurred in which a sailor was struck on the back of the left shoulder. In this case, however, no fracture took place but simply a dislocation forward of the first and second left ribs. The clavicle was unaffected.

The second and third points in relation to fractures at sea are best dealt with together for the sake of clearness. Referring to the appliances at hand for the treatment of fractures, from the foregoing remarks on the subject of ætiology, it will be seen that some modifications are bound to be called for in putting them up.

The legal equipment of a ship coming under the Emigration scale consists of:— 1 McIntyre splint, adult size; 6 sq. ft. of cardboard; 1 or more sets of wooden splints for leg, thigh and arm; plaster of Paris bandages of varying quantity; Gooch splinting, also in varying amount according to numbers carried.

The above is quite a formidable list, yet it is few cases of fracture which will not require the assistance of the ship's carpenter to make splints for the occasion. These will have to be devised by the surgeon according to anatomical relations which are probably of an unorthodox nature.

In addition to abnormalities of fractures as far as those of the lower extremities are concerned, their successful treatment is further complicated owing to the absence of a steady platform. Few vessels, indeed, are fitted with swing fracture-cots. It requires ideal weather conditions, even in a large ship, to avoid a slight though continuous lateral movement of the patient as he swings in his bunk. The vibration of the ship is also not without effect upon a fracture.

Thus a lower limb must not only be immobilised in a splint, but the splint and patient must be made immobile in the bunk. The use of pulley and extension weight is also affected by the roll of the ship. It causes a series of jerks on the lower fragment as the weight swings to and fro by gravity, and it is sometimes painful to the patient. In fact, a pulley and weight are best omitted if not seriously indicated.

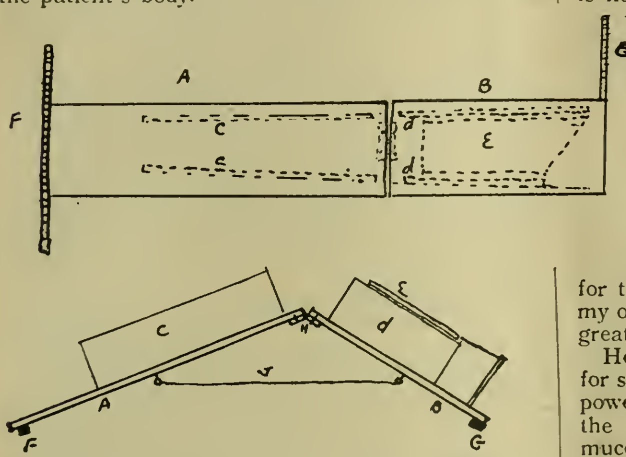
If extension is required and site of the lesion permits, then it is best applied by putting the patient's boot on. Two rings or hooks are screwed into the heel and forward part of the sole. These are connected by a wire or cord, to which the extension rope is fastened at the proper angle, and then led through the pulley at end of bunk. This method has proved far superior to the orthodox stirrup made with adhesive plaster. For the tropics it is especially good as the boot can be taken off to permit cleansing of the foot. Sticking plaster, under these conditions, is liable to slip and cause irritating dermatitis. In fact, it should never be used in the tropics for this reason.

A Salter's Cradle can be made by knocking the bottom out of a good sized soap-box, and suspending the injured limb from the frame so obtained. It is a better and more comfortable method than that of slinging the leg from the berth above as is sometimes done.

For general purposes, a removable plaster of Paris casing makes the best splint. It takes a longer time to apply than any other and the process is messy, but it has the advantage that once it has been properly moulded, it is always *in statu quo ante* after removal for massage. Where this method is contra-indicated, the best alternative is that of the double-inclined plane adapted for ship use. Here two points must be borne in mind. The first is to fit the planes to the patient, and then to make them and the patient immobile in the bunk, or as much so as possible.

The former is obtained by careful measurements taken from the sound limb. Two pieces of board, a little wider than the limb in its varying parts, are hinged together, the angle between them being regulated at will by an eye-bolt on each flap, connected with string. On these base-boards, side-boards are accurately fitted, so that the limb is encased on three sides. The inner thigh board must be made shorter, fitting up to the crutch, while the outer one should extend up to the anterior iliac spine. Packing is added where required with Gamgee tissue which is found among the medical stores. A top piece, well padded, is then placed over the seat of the lesion if necessary, and is kept in position by bandages or straps.

To fix the apparatus in the bunk, a cross-batten is nailed to the bottom of the foot-piece, projecting about nine inches on either side. The thigh piece has a similar batten on its outer side only. With this arrangement a "slipper" can be used. If wanted, more extension can be applied to the lower fragment in the ordinary way. Additional immobility is obtained by sand bags on both sides of the patient's body.



A. Leg flap. B. Thigh flap. C. Leg side pieces. D. Thigh side pieces. E. Splint over site of fracture. F. Rolling chock for leg flap. G. Rolling chock for thigh flap outer side. H. Hinge. J. String to regulate angle of flaps.

The diagram explains itself, and the whole can be made and fitted within half an hour. This method is especially useful for children, as by it they are completely mobilised. For them, too, a Bryant's Box is contra-indicated, owing to the roll of the ship. It might be added that for a fractured femur a long Liston's splint is not so satisfactory or comfortable for the patient. With the rolling of the ship, the patient rolls in his splint, and complete rest is not obtained.

As far as the author's personal experience goes, fractures of the upper extremity do not diverge so greatly from the orthodox as those of the lower. They do not call for any special mention further than to draw attention to the possibility of abnormal anatomical relations brought about by abnormalities in the form and direction of the violence producing them.

In conclusion, it may be added that the ship's sailmaker should easily be able to make a canvas swing cot and the carpenter to fit it with bottom boards. It may not be out of place to remind ship surgeons of the nursing side of their nautical duties in avoiding the incidence of boils and bed-sores in their patients. (*a*) Frozen food, even after three or four weeks, is undoubtedly a predisposing factor, if not the sole one in their formation. To the recently discharged house officer, nursing details are apt to assume a minor importance in cases, owing to the presence of a nursing staff to perform them. At sea, however, the surgeon is usually the sole professional man on board, and must combine nursing with medical duties.

THE TREATMENT OF SYPHILIS.

By PROF. GAUCHER, M.D.,

Professor of the Clinic of Skin and Syphilitic Diseases in the Faculty of Medicine, Physician to the Hospital St. Louis, Paris.

[Specially Reported for this Journal.]

So many errors have been published within the last few months on the treatment of syphilis, that I believe it necessary to fix the therapeutics of this malady and to teach you, as it is my duty, what should be done and what should not be done, what is useful and what is useless and even dangerous, what may be expected from a treatment and what it cannot give. You will easily understand that it is not alone the classical treatment I am going to expose to you, but this new remedy which has been so widely advertised as a panacea for all the manifestations of syphilis.

I have returned from the Congress at Rome where I heard every opinion expressed, where I took part myself in the discussion, and now I place before you the conclusions of this discussion which had been resumed in measured terms by Prof. Finger (Vienne). "The 606 does not sterilise syphilis; the relapses after the 606 are more frequent than after the usual mercurial treatment." This is what I claimed for the last 18 months, and I was glad to see that my opinion formed at the first is now adopted by the great majority of syphilographists.

Here is the truth about the 606: It is a remedy for special cases endowed with very rapid cicatrising power. Every syphilitic ulceration at any period, the most ulcerating chancres, the most obstinate mucous patches, the profoundest tertiary ulcerations, are cured and cicatrised very rapidly by arseno-benzol, with more rapidity than with idodide of potassium or mercury, in the generality of cases, but not, however, in all. The 606 possesses consequently a very rapid cicatrising power, but that is all.

These ulcerations once healed always relapse if they belong to a period of syphilis where the lesions frequently return, that is to say, mucous patches, secondary ulcerations or primary chancres; the chancre re-appears frequently at the end of two or three months. On the other hand, tertiary ulcerations seldom return, but it is thus with the other remedies for syphilis.

In reality the 606 is deceptive; it only cures for the moment, produces in no wise sterilisation of the disease even where the injections are made at the very outset. A third of cases of syphilis present little more than the chancre, a fugacious rash, a few mucous patches which get well easily or pass unnoticed. It is among these benign cases that twenty years after we find tertiary accidents of varied forms. The 606 does not consequently cure syphilis, it only cures the syphilitic ulcerations. But it possesses on the evolution of the disease a very curious retarding action which contributes to make it a *perfidious remedy*.

I have already said that the chancre may return after a period of two, three or six months; an analogous phenomenon is observed after injections made during the secondary period. The mucous patches cicatrise with amazing rapidity, the skin and the mucous membranes are cleaned off in a few days in a really surprising manner, but they return at the end of a few months with intensity

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(*a*) See the Author's work, "The Ship Surgeon's Handbook." Second Edition, 1911. Price 5s and under a form unusual to observe at this period. I saw in women treated by injections of arseno-benzol at the very outset of the disease, the mucous patches return at the end of a year or 18 months, that is to say, at a period when in syphilis properly treated with mercury, the patches no longer, so to speak, existed. Arseno-benzol is thus but a drug to be only occasionally employed, and its indications are very limited; it may contribute to render the disease latent, but it does not cure.

If you employ the 606 to heal more rapidly the chancre, you should warn the patient of the possible return of the sore several months afterwards; if you use it against the mucous patches, you must not be surprised if you see them return and more tardily than in syphilis abandoned to itself.

The first indication of the German specific is limited to the cicatrisation of the chancre or the mucous patches; the second is more important. In cases where mercury is without action or where this action is exhausted after prolonged use, the treatment by arseno-benzol is legitimate. It is also legitimate in case of intolerance for mercury. But it should be borne in mind that the 606 acts only on the cutaneous ulcerous lesions and never on those of the quaternary period: ataxy, general paralysis, leucoplasia.

In any case, when you may judge it necessary to employ the remedy I advise you to employ small doses, after assuring yourselves of the integrity of the viscera, especially of the kidneys, the nervous system, the eye and the ear; I counsel you to use it with fear and trembling as it may be very dangerous even in small doses, without knowing why. It is needless to go into all the theories invented to explain the causes of death from the 606; the cause is simply arsenical poisoning. The patients succumb with generalised visceral congestion, particularly of the kidneys, as in animals poisoned with the 606.

Like all organic preparations of arsenic, the 606 is fatal to the kidney; it is particularly dangerous when this organ is already affected, but it is capable by itself of producing toxic congestive nephritis. It is also dangerous for the nervous system, manifesting itself by the production of an abundant rachidian lymphocytosis.

I had to treat a case of polyneuritis due to injections of salvarsan as well as several cases of deafness and noises in the ears, and one still more grave—complete cecity from optic neuritis.

Arseno-benzol has caused more deaths than syphilis abandoned to itself could produce; recent syphilis is not fatal, and when one speaks of succumbing to syphilis, distant results are meant: cancer of the tongue, general paralysis, ataxy.

The conclusion of all I have said to you is:

The 606 may be very dangerous without knowing why, hence it should be used with caution.

The 606 possessing but a limited and momentary action, it should not be regarded as an habitual treatment of syphilis.

The treatment of syphilis remains consequently what it was before—viz., mercury and iodide of potassium. The best mode of administrating mercury is that of injections and the best preparations are those of the soluble salts, benzoate or biniodide of mercury. Where injections are not accepted, rubbing in for twenty minutes of strong mercurial ointment is the next best treatment. A drachm of the ointment is rubbed over a limited space on the side of the thorax and transferred to the opposite side every second day.

Administration by the mouth is inferior to the subcutaneous method but sufficient for ordinary cases, especially when the disease is treated during the first two or three months by injections. For it must be remembered that the most important treatment is that of the *début*—that is to say, during the period of active virulence.

The preparations to be employed by the mouth are: corrosive sublimate in pills or lactate of mercury in solution. The pills are composed of sublimate and extract of opium, one-fifth of a grain each, and the dose is two daily. The solution of lactate of mercury is of the same strength as Liq. Van Swieten (1-1,000), the dose is one dessert-spoonful twice a day. With these preparations you can treat every case of syphilis in all its stages.

If you are called to treat a case of syphilis at the very outset you will act as follows:—

a. During the first month you will give an injection of 2 centigrams of benzoate of mercury each day.

The following month an injection of 2 centigrams every two days.

b. After one month rest, a month of pills with corresponding rest, and so on for two years.

The third year the pills will be given one month followed by two months' rest.

The fourth year, one month in each six months.

In all these periods it will be frequently useful to replace for a time the pills by the injections.

A treatment covering four years is generally necessary, even if the reaction of Wassermann is negative. For my part I do not think marriage should be permitted before five years have elapsed. In any case it would be necessary that the patient should undergo a treatment during one month preceding the marriage.

I have already referred to iodide of potassium as an auxiliary to mercury. What are its indications? Iodide of potassium is only an adjuvant of mercury, it is a resolutive agent useful in all the periods of the malady, against rebellious lesions, extensive, grave, menacing or against infiltrating lesions. You will prescribe it associated with mercury in phagedenic chancres, in papulous, tuberculous syphilides, gummata and visceral manifestations, especially in nervous affections. It is employed in 2, 3, 4 or 6 grammes per day.

The mercurial and iodide treatment is the basis of the treatment of syphilis in all its manisfestations. It is only where this treatment has proved itself to be insufficient that you are authorised to employ organic arsenic.

DEMONSTRATION OF A SYSTEMATIC POSTERIOR PERCUSSION OF THE APICES, AND OF THE "OVAL INTERSPINOUS DULNESS" AS AN AID TO EARLY DIAGNOSIS. (*a*)

By WILLIAM EWART, M.D.CANTAB., F.R.C.P.,
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The normal "Oval Interspinous Dulness" is the corrected edition of the original "Interscapular Lozenge-Shaped Dulness," which was imperfectly analysed and too loosely described in the Dorsal Map of Percussion in 1899, and again in 1910. Never unmindful of the value of a dorsal examination of the apices and of the lower apices (which will also be briefly considered), the author's previous diagnosis had hitherto lacked the elementary accuracy dependent upon a familiarity with the *normal field of percussion,* and with the precise boundaries of its normal pulmonary resonance, and of its normal mediastinal dulness. These can now be defined by the pleximeter in their normal individual variations, as a guide to any abnormalities, whether *respiratory*

(*a*) Abstract of paper read at the Medical Section of the British Medical Association Annual Meeting, July, 1912.

(pleural, pulmonary, etc., including functional irregularities), or *mediastinal* (mainly structural and of varied derivation). *That familiarity is indispensable for the earliest diagnosis* of apical tuberculosis by physical signs; although this is only a small section of the general diagnostic usefulness of the new sign.

For Apex Diagnosis the most valuable peculiarity of the oval subresonant dulness is the normal respiratory oscillation of its edges with inspiration and expiration. This affords a *standard* wherewith to gauge the normal, or the deficient respiratory activity of the apex, the latter being the earliest of all morbid events in phthisis. It is also a *test* for the "functional" or the "structural" significance of any apical inexpansion. Again it is the indispensable *differential test* between "local lesions" and "local atelectasis." Its close study opens up an important range of localising observations and of fine indications which are alone adequate for the purpose of early diagnosis.

The Vicissitudes of the Oval Dulness under the varied respiratory affections (pulmonary emphysema, asthma, congestion, bronchitis, the pneumonias, the pleurisies and pneumothorax, etc.) are a vast subject to which only a cursory review can be given.

The Mediastinal Aspect of the same study, that of the intensifications and of the encroachments of the dulness of the oval patch, is yet more varied in its scope; and this includes an extensive *surgical* range of diagnosis. The chief medical representatives in that group are the cardiac, the pericardial, the vascular, the œsophageal, the neoplastic, and lastly, almost comparable in its numerical incidence with the group of phthisis, the glandular. They all of them react also upon the behaviour of the "retro-vascular dulness," of which the oval patch is the upward continuation.

The Practical Conclusions are summed up in one statement: The method is indispensable for efficiency in apical and in mediastinal diagnosis. Its practice is a necessity; and this involves the unavoidable adoption of the means which are essential to its success.

THE MATERIAL OBLIGATIONS OF SPIRITUALISM AND ALLIED PHENOMENA. (a)

By T. CLAYE SHAW, M.D., F.R.C.P., etc.,

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(Concluded from page 188.)

In his book, "The Other Side," Mr. Horace Vachell gives us an account of a person who was killed in a motor-car accident but whose spiritual existence (which in a letter to me he calls a sort of astral body) was continued afterwards as a "transformed David"; but, just as in "Theokosmia," Mr. Vachell's story is but the assertion and description of a highly-imaginative man who wrote the book in all seriousness, an embodiment of ideas arising in the course of an eventful life, at times far away from the haunts of men and in circumstances calculated to wake the splendour of phantasy for which the author is so well known. Notwithstanding, all ends in nothing—indeed it is more than this, for it assumes what we know to be impossible, the re-vivifying of dead matter, which even the Spiritualists themselves acknowledge to be impossible, for in all their rambles they maintain the necessity of having live matter to deal with, hence the obligation of electric currents. We might just as well expect that if a piece of necrosed femur were placed among the living tissues of the body from which it was taken it would be again re-constituted and become a living integral part of the living tissues—or to put it in their own way of expression we should expect to see the spirit of the bone re-enter and be incorporated with that piece of bone, a thing which we have every right to say cannot be, for we act on the latter assumption and find it to be true when we use ivory pegs to support disrupted ends of fractures, knowing that though placed in juxtaposition with living structure, the props or supports will never become living matter. If we believe that Lazarus was raised from the dead and lived again in the natural flesh, if we believe that Paul brought Eutychus again to life by breathing upon him, if we believe that Peter brought back Dorcas to life by the same process of breathing upon her, we may do so without crediting the Spiritualists of to-day with powers to which they pretend, of reversing the laws of matter, which laws they own to obtain in the spiritual world. We may say to the Christian Scientist, you profess to cure disease by Faith, but you fail; and in what you call your successes we can supply you with material reasons in obedience to known laws which account for what happens, and are intelligible and will stand the test of experiment in that they can be repeated; we may say to the mediums and the spiritual *séance* professors you show us nothing new, you cannot inform us of anything which promotes the progress of the race, you lead us no further in any spiritual or material path than we now know, and we can account for all you do by ordinary experimental processes. We say that you, an acknowledged inferior creation, attempt to compel the intervention of a higher Power or Force by material processes such as crystal-gazing, and make statements as the result of your reported intercourse which are not true and do not come to pass. We say that your major premiss may be true, but that as you (in your own words) have no possible conception of it, you can draw no conclusions from it because the terms of your argument put you without argument. You, in all your deductions, follow the example of Chanteclair, who attributed the break of day to his own crowing, or like Owen Glendower you attribute earthquakes to a recognition of the fact that he was born. The tendency of modern men of Science and of our own Profession is more tolerant of the possibility of there being a Force, Power, Soul or Mind (by whatever term to like to call it) than it was.

There are among us men who say that they have certain powers over other people, such as Personality, power of Hypnotism, etc., which they claim but cannot explain. There is no doubt that Personality, the attribute of influence, does exist in some people more than in others, but it can be explained without recourse to the supernatural, the laws of which we do not know. There is no doubt that at the word of command some people, not all, will assume a hypnotic condition, but we know that a person who is hypnotised is his own agent, and that under the name of auto-suggestion he can perform the process on himself. I have no doubt that any medical man who practises hypnotism would be the first to acknowledge that he does not possess any peculiar Power in this direction, for it is indeed a physical process which in a greater or less extent may be acquired by anybody, may indeed be taught in a school or clinic of psychiatry. But the public, which is uneducated, rushes into its own way of accounting for what it cannot understand, and attributes the phenomena to a spiritual agency of which nothing is known. The charlatan takes advantage of this, claims that he can disclose things which are in the future, takes the money from those who do not see that however previous the spirit may be there is *no living material of the future*—it is in the present—and so they go away empty or filled with what are at best guesses and deductions from the present. Professor Stout "sees no sufficient reason for being particularly sceptical concerning communication from departed spirits," and Professor J. S. Macdonald has recently stated (see Physiology, British Association, 1911) that "there was some loophole for the view that mind was not directly associated with life or living matter, but only indirectly with certain dispositions of dynamic state that were sometimes present within certain parts of it. Where there was evidence of Mind the view was that it represented a force acting from without upon what was still no more than matter involved in certain chemical and physical states." So that Mind is a Force consisting of such terms as Will, Attention, Truth, Love, Hate, etc., acting upon material which is more or less fitted to receive it and to make it manifest. It is not the same thing as Life, because we have many manifestations of Life without the slightest sign of Mind. The body and brain are mere instruments upon which Mind plays like an Æolian harp under the influence of the wind. The views of Sir Oliver Lodge appear to be of the same kind except that his view of matter is that it consists of ions in *rotational* motion, and that some universal,, homogeneous substance in simple *vibrational* motion is Light. Inasmuch, then, as the body has no Will, Attention, Choice, *in itself*, it is but a form of matter, which cannot originate anything, but is the medium through which properties existing external to it can operate, and nothing more. It is a necessary postulate that the more the material is developed the more extensive and diverse will be the field of demonstration of Mind. What then is this Force? Is it when in action the same everywhere? Does it act on the idiot as it does on the intelligent and growing child, and when that child grows, and as it grows, does it still remain the same, and when he becomes a man is it still the same in quantity and quality? Apparently it must be. The hypothesis assumes that ethereal Mind is all *Knowledge*, all *Reason*, all *Choice*, all *Attention*, and that it can operate on a body which is fitted to respond to its vibrations. Development of the body must then precede manifestations of mind; and in this way only can a material body show such functions as will and attention—faculties which are not in it but are displayed by it, the display of which causes the material to think that it is doing it itself. Will, Attention, Knowledge generally are then borrowed plumes—they do not belong to us, we are merely the mannequins on which they are paraded. This initiative force is, however, in some sense material. Lodge called it one universal substance perfectly homogeneous and continuous, so that it must be subject to change and to exhaustion unless it is constantly renewed. Is that the reason why we cannot display certain mental processes for more than a short time? Does the Force get exhausted, or is it the body material which strikes, because it has to function for so long a time? If so, why does not the Body compel the Force to stop before this process of exhaustion comes on? It cannot, on this hypothesis, because it is a driven thing with no initiative of its own. Can it be that this omniscient Force, by constantly working upon a certain part of the Brain, can develop it and leave a part of its Power there, thus giving us some degree of voluntary effort, and of attention, and of other qualities? We may fairly say that as bodily processes are persevered with they do develop, and that the balance of experience in a structure may become determined in one direction more than in another; but this is merely saying that the material for Force to display itself upon is greater in quantity, and does not prove that it has come to possess any new quality, for it has not been shown that Force can alter material; it is hypothecated that the proper material must first be there, else it cannot exert itself. Will and goodness cannot move a stone because the physical conditions of living matter are absent. Force must have living material to act upon, and not only that, but the material must be of the right kind and in the right condition to be acted upon, because diseased living tissue cannot be supposed to be within the orbit of spiritual influence; indeed, diseased material is generally not only of lower vitality than the original, but is of a different kind and structure. According to the teaching of Spiritualists, there are good and bad Spirits which act upon living human material. If a man is good—*i.e.*, has material for good in him, how is it that he becomes (as is very often seen) bad? Is it that the good Spirit is overcome by the bad Spirit, or is it that the good material becomes inferior in quantity to the bad material which, it is to be presumed, comes then under the influence of the evil Spirit? If so, then the Spirits are under the control of the material and are not (as the Spiritualists say) the developers of the material; for in the case supposed why should the good Spirit, which has it all its own way, allow itself to be caught napping and let another, and a destructive, influence take possession of the field? The whole hypothesis is a fanciful assumption.

(a) The Harveian Lecture, read before the Harveian Society, on Thursday, March 28th, 1912.

If through fear of injury by falling I refuse to climb a hill, Force or external Will does not help me—I remain at the bottom. If, however, I am conducted or helped up and thus taught that there is no danger, I acquire experience and my material basis for knowing that I can with impunity climb is increased; then and only then can the Force or Spirit act, so that Spirit does not create possibility of achievement, it has to wait for material development. In plain fact all spiritual teaching is material—its ideas are either material or non-existent—its experiences are material—its symbols are material—its rewards and punishments are material as also are its metaphors. It is in fact materialism. The man who is called the Agnostic may be the only true Spiritual believer! He it is who says—"I grant the possibility, thereby expressing a Belief in a Force which has powers which I cannot conceive and do not understand, which may have its own laws but is in no way of competency to be regarded as capable of personation by a dove, nor indeed composed of essences which we call good. Therefore I am content to go on building up my body in what seems to me the best way, and when I fail I have recourse to others, whose experience and skill are better than mine to assist me. In the fact of this Power I accept things as they are. I see people suffering from organic disease whose requests to be healed are not granted—they die; these people rely upon what they call 'Faith,' but they obtain nothing of the result which they ask for, and the reason is that they do not know the nature of the God they appeal to, and so may be entirely wrong in their methods."

And so in our profession the man who practices "Suggestion" will do nothing by going on any other assumption than that by constantly repeating what he wishes to impress, he educates his patient to be able to say "I can" whereas before he lived in the fact "I cannot." Since the hypothecated mental functions are not material agents as far as we know and can conceive, but only act through living material which is the compelled and is in no way a compelling agency, and since we avowedly know nothing of the real nature of this Force, which, however, we are content to assume, we can have no mental pharmacopœia, no means of strengthening or weakening Will, Attention, Emotion, even consciousness, except by placing the material in such conditions as we think best fitted to obtain the result which we desire.

We have succeeded, as Science has become extended, in gaining the mastery over some forms of what we call "dead matter" so as to make it the better exponent of what we call electricity and magnetism; we have even succeeded in making the living material body a better exponent of the Force which we call Life; but we are just as incapable of understanding the real nature of Electricity and Magnetism as we are of Life. Without doubt we shall go on improving our knowledge of the scope of action of these various Forces, but that we shall be able to understand and have mastery over the Forces themselves is quite another question. Here is the *argument of obligation* which I do not see that the Spiritualists can get over. These are told that "there shall be no more repetition of these signs and wonders" until a certain time which has not yet arrived. If then they are bound by this declaration—as they must be—how can they explain either the revivification of dead matter as in the case of *reported* ghosts, or the compulsion of Spirit by living material agency as in *reported* conversations and enlightened manifestations through the agency of living mediums? If we can show that most of the reported phenomena of

Spiritualism can be explained by what we know of material conditions whilst we can also show that what we cannot explain is either unimportant, unprofitable, nothing but subjective assertion, the burden of proof that it is anything else lies with those who deny that it is unprofitable, unimportant and merely assertion, and as they never furnish the proofs there is no more reason to believe them than there is in believing in the existence of snakes and spectres in a room, because a man in an acute attack of delirium tremens says that they are there. I cannot find that in the treatment of mental disease there is any serious attempt to alter what are supposed to be such symptoms as are termed impaired Will and power of Attention, disordered Emotion, false ideas, obsessions, etc., by any other means than suggestion and material remedies. If we suppose, for sake of argument, a man whose affection for usual objects is lost or perverted, who cannot make up his mind, *i.e.*, who cannot will to do that which he desires, who cannot fix his attention, who cannot continue the good acts by which he was known, we may use the spiritual hypothesis, appeal to spiritual processes of which we have no knowledge and therefore do not know how to deal with; or whilst acknowledging the existence of a power which may have such inconceivable attributes, but only shows them when in conjunction with living material, we may try to bring about the correct interaction by righting the material. In the former case we are taking up the treatment of the Ecclesiastic; in the latter we act simply as medical men who find that in most cases the method of the Ecclesiastic or Spiritualist has no result, and that when there are favourable results, these may be explained by the material alteration induced, by suggestion, or by what is known as the personality of the operator, which is nothing more than an aggregate of physical properties.

There is neither time nor space here to enter into the discussion of the connection between the higher brain cells and ideas, but this much may be stated, that we do claim that education and experience do produce a wider range of mental function, and this is brought about by development of material structure (for we cannot educate an immaterial force which is supposed to be perfect), and therefore by providing a more elaborate material we can give more for the force to act upon, and if we find that such a function, as say Will, is absent, we can physically bring about such an excess of material in a special direction as may enable the force to act, *e.g.*, by suggesting to a person that he can do a certain thing we, *by constant iteration*, so impress certain cells of the "I can" order that the other opposing ones of the "I cannot" order lose their power through discontinuance of existing cause. In the same way he may grant that toxic agents or other causes of degeneration may prevent the *power of response* to Force, and that thus wrong and unbalanced action is brought about. In either case, whether we adopt the spiritual or the material view, the process resorted to is the same; we try to amend the material of which we know something, and we leave the spiritual, not because we evade its existence, but because we know nothing about it nor how to go to work upon it. The Spiritualists say that they can convert part of themselves into spirit form, leaving part behind into which they can re-enter. This part thus separated can enter into communion with other complete spirits of various degrees of superiority, or, as they express it, of different spheres. If it thus comes back with fresh knowledge, how does it impart it? It cannot, because the *material which it re-enters* is not educated to receive it; there is no available material for the new-informed spirit to work upon. Again, how can they separate this Force? If they can they must possess a controlling power over Force or Spirit which is all the time supposed to be the superior agent! After all, the *educated material* is necessary for the Spirit to work upon, and we may both ask the question and supply the answer. Why is nothing ever vouchsafed through an Idiot? Because the material for working upon is not there. It is in this way that they ascribe intellectual gifts to special grants from spirit-land. They quote the case of George Stephenson, and say that the invention of the locomotive was put into his head by spiritual interference. We all know that the history of the discovery of the power of steam and the development of the engine is a very different thing from the implied spiritual influence of the Theocosmics, and that even now the machine is in a transition state and has not attained its full development. As to what becomes of the part of the body left behind and deserted by the exploring Spirit, we have no information, except that it does not vanish nor does it lose its life, though it evidently loses power of mental or nervous demonstration; anyhow, it must deteriorate. No wonder then that we have complaints of exhaustion after these spiritual communications, and the wonder is that if *part* of the Spirit can be separated and afterwards brought back with immunity, these Separatists do not disassociate the *whole* of their spiritual energy in a grand effort to extract more information; they may be leaving behind the very part which would be of real service to them! Wherever there is a supposed but unknown region, there are always plenty of would-be discoverers, and if, as the Spiritualists maintain, they are able to enter these regions and to return, we have a right to expect that there should be some result from this espionage; but so far they have brought back *no grapes*. The burden of proof that they have ever been into the coveted lands rests with the pioneers of the mission. There is a fascination in prosecuting search after the ideal to the neglect of the prosaic commonplace of the real. Even Tennyson walked miles to see the point on Lyme Cobb from which Jane Austen made her supposititious heroine, Louisa, jump.

One of the most neglected features in the study of psychological problems is that part which is called Epistemology, the realm of validity and reality. I see outside an external world which appears to me and to most others a reality of a certain and definite kind, but it is very possible that it is in essence of a very different nature from what it is conceived to be. As a fact, all thought should be received as the eccentric projection of what goes on as the result of stimuli and internal processes. When we see or hear an object or a sound, it is at a certain distance *outside* us, not at the very centres which receive the impression and internally have the perception of it. And so it is in thinking, in ideation, even in abstract ideas. If we think of abstract goodness or of concrete furniture or of the act of going upstairs, it is all *external* to ourselves, and in no way does it seem to be *within* us—the wonder indeed, is that, with an exoteric existence we ever come to think of *ourselves* as doing anything. A man sets himself to think of, or to do, certain things and they either happen or they do not, but in either case there is no consciousness of any internal process, all seems to be outside—even feelings of joy or sorrow are probably to be traced ultimately to the fact of Resistance, and are in no sense perceived as an internal change or state. After climbing to the top of what has been said to be an inaccessible mountain we may be satisfied and gratified and are said to feel pleased, but this is nothing more than the relief from the strain of certain *externalities*, the desire to be at the top of the mountain was an integral part of the idea of the mountain and the means and ways to be used in arriving there, the feeling of pleasure and pride in having succeeded are only the ideas of the congratulations of friends, of the downcast appearance of detractors, of the success either in fame or money of the book to be published, or of the applause of the learned society before which the adventure will be narrated, and all this is *external*; there is nothing more to be done, Resistance has vanished. I cannot but think that this externality, this consciousness of referring all that we do and think and say to what is *outside* has much to do with our views of the mystery of life. Eccentric projection has never been properly explained, and though it is certain that Presentations, Feelings, and Ideas are really within us, really, *i.e.*, in their actual material seat of resistance, yet the mystery is that we do not recognise them *where* they occur but only as outside ourselves—as if indeed Mind was quite independent of Body. Hence the tendency to assume mysterious agency for what we notice, for that which we did not know we were ourselves thinking about. Very often the material structure of the brain takes action on its own account, in other words, energy is set loose in a manner foreign to the *res gesta*—accumulated energy is touched-off by some internal physical process, and the result is an induction or a deduction which surprises us, and inasmuch as it occurs in an unexpected manner, and is to all appearances external, the self-idea is apt to be cloaked in an externality which does not really exist, and what happens is referred to the influence of external agency. The *Deus ex machina* is no foreign god, it is oneself—the part of *themselves* which the Spiritists say they can convert into spirit form is the projected action of their own central mechanism—action which is possibly brought about by intense concentration on a limited area already well-primed with energy of a particular kind. Spectres and Ghosts are but the discharges of gorged centres accompanied with the well-known phenomena of eccentric projection, and Telepathy is an unauthorised and irrelevant conclusion arrived at by people who, recognising that what they think has a *deceptive externality*, but failing at the same time to perceive the illusion, invent to themselves the idea that they are voluntarily projecting waves of thought which may interact with other waves projected by individuals with whom they assert that they are in harmony. It seems to me that this fact of the eccentric projection of Mind or Thought has never been sufficiently appreciated in estimating the validity of reported demonstrations from the occult. That it is inexplicable does not prevent our acceptance of it as a fact, whilst it saves us from the uncomfortable and distracting suspicions that we are at the mercy of agencies which have been credited with powers and influences when all the time they are the unrecognised figures of ourselves—figures whose validity depends upon the way and extent to which we educate such receptive organs as we possess, and which, of course, it must be owned, are of greater or less development and potentiality in some than in others. If one reads the work of F. Myers, of Sir Oliver Lodge (The Survival of Man), and his account of Mrs. Piper, of telepathy and clairvoyance, one is bound to admit that some of the occurrences related by these imaginative (used in its speculative sense) and scientific men are inexplicable on the data vouchsafed, but the "cosmic scheme" spoken of, the "cosmic philosophy" of Myers is still undeveloped, and we who are anxiously waiting for something more than crudities, trivialities, and irregular and spasmodic utterances, are in the meantime brought face to face with contradictions of physical laws, which ought not to be the case in any scheme which professes to deal with that which, however immaterial it may be, is still acknowledged by its projectors to act in obedience to Law. We do not call the eminent men who have given in their adhesion to Spiritualism hard names, nor do we admit ourselves to be anything worse than sceptics who contend that our scepticism is quite ready to be turned into Belief when those upon whom the burden of proof lies have given us something more solid than assertion to found their edifice upon and have demonstrated the unity of law which is as binding upon a Creator as upon the created.

OPERATING THEATRES.

ST. THOMAS'S HOSPITAL.

A Case of a Strangulated Hernia, first in one, and then in the second Sac (a Hernia en Bissac) of an Inguinal Hernia.—Mr. Edred M. Corner operated on a case of hernia.

Before the patient was brought to the operating theatre, Mr. Corner said that the patient was a man æt. 35 years, who was admitted three days ago with a strangulated inguinal hernia of the ordinary type. The man had no idea that he had a hernia until it suddenly appeared and was strangulated about twelve hours before his admission to the hospital. He had never suffered from any pain or discomfort in that region. The first operation was a very ordinary one. The sac was found to contain little or no fluid and a knuckle of small bowel. After dividing the strangulating band, the neck of the sac, by a so-called herniotomy, the strangulated knuckle of bowel was drawn down and inspected, together with the portions actually pressed upon by the strangulating bands. Being healthy bowel, it was returned to the abdomen, when it did not recede, as returned bowel usually does. This was investigated, and a finger passed through the internal abdominal ring into the abdomen and the coils of small bowel in the pelvis. Hence all was deemed to be satisfactory, the hernial sac removed, the canal sutured and the operation concluded secundum artem. The first day after the operation the man was distinctly relieved. The second day the relief was not so satisfactory, whilst on the third day it was obvious that he either had intestinal obstruction or perforation. But, clinically, it did not appear possible that he could possibly have obstruction to the small intestine from the absence of clinical signs, *e.g.*, vomiting. Indeed, the great signs were severe abdominal pain, unsatisfactory action of the bowels, and that only to enemata, etc. In fact, in general unsatisfactory progress after the apparent relief of a strangulated hernia. He might have partial intestinal obstruction or peritonitis, probably connected with his strangulated hernia; possibly not. Hence, Mr. Corner said he was not going to reopen the patient's hernia wound, but was going to make a cœliotomy incision through the right rectus, so that he was in a position to explore the patient's hernial rings and his abdominal cavity, if necessary.

The abdomen was opened, and when the site of the strangulated hernia was examined it was found that a knuckle of small bowel entered and was strangulated in an abdominal sac. This abdominal sac was the intra-abdominal chamber of a hernia *en bissac*, the scrotal chamber having been removed at the first operation, and the strangulated bowel apparently, and unfortunately, reduced into the second and abdominal chamber, where it gradually became strangulated. Such an accident must be very rare.

Nothing much, Mr. Corner said, is known of these herniæ *en bissac*, probably because the second and abdominal chamber is overlooked, unless it becomes the site of a second strangulation, as in this patient, or discloses itself as a properitoneal hernia. These properitoneal hernia sacs are of two classes, prevesical, or in the iliac fossa. The former are much the most frequent. The latter, the iliac form, was present in this case.

The neck of the intra-abdominal sac was split by pressing a finger into it and the ensnared loop of the bowel released. The loop speedily recovered its colour and vascularity, becoming "returnable." At one point where the bowel was pressed upon by the strangulating agent it was "doubtful" and was sequestrated, *i.e.*, invaginated by a series of Lembert stitches with a continuous suture. The abdomen was closed. It was noticed that there was some degree of peritonitis present, and it was hoped that now that all strangulation was relieved the patient would recover from this.

Subsequent Note.—Unfortunately, the patient did not recover, a post-mortem examination showing that this was due to the extension of the peritonitis noticed at the second operation, and that the "doubtful" and sequestrated segment of the bowel had not become gangrenous. This peritonitis had arisen from the diapedesis of organisms through the walls of the bowel just above the strangulation, and is an example of the infectivity of strangulated herniæ insisted on in the Erasmus Wilson Lectures of 1904, delivered before the Royal College of Surgeons.

The importation of absinthe into the United States will be prohibited after October 1 next under a decision of the Pure Food Commission, which has been ratified by Mr. James Wilson, the Secretary for Agriculture.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Aug. 24th, 1912.

Some Interesting Cases for Gynæcologists.

At the Gynæcological Gesellschaft, Hr. Strassmann showed a patient, æt. 33, who had once been delivered with forceps, and twice spontaneously at later periods. The pelvis was a flattened, rachitic one, with a conjugate of 9½-9 cm. At the third confinement forceps had been applied; she was then given an anæsthetic and turning was performed. During this a rupture of the uterus took place. This was diagnosed at once, and laparotomy was performed, the patient being in a half-sitting position. In the abdomen was a living, full-time child, and a huge hæmatoma in the right broad ligament. Extirpation of the uterus was carried out, along with that of the so-called adnexa of the right side. The vermiform process also, which contained a coprolite, was removed. It was remarkable that the main stem of the uterine artery was uninjured. Recovery was uninterrupted, but after an interval of four weeks a uretero-vaginal fistula made its appearance. It was still there.

Hr. Sigwart showed a patient, æt. 36, who had given birth to nine children, all the labours being completed spontaneously and quickly. On this occasion the pains were weak, and they suddenly ceased altogether. The midwife recognised a transverse presentation. The elbow of the child was felt in the os uteri. Above the umbilicus, and to the right, was a hard tumour, the shape of the uterus; and to the left a similar hard body. Laparotomy was at once performed. when the fœtus was found to be totally expelled through a rent in the cervix. The main stem of the uterine artery was torn completely across; uninterrupted recovery took place after total extirpation of the uterus.

Hr. Dahlmann showed preparations from a woman, æt. 40, a 13-para., who had borne a full-time child nine times. She was in a febrile state when admitted. The membranes were ruptured at the end of two hours. Sudden and deep collapse and death after evacuation of the contents of the rectum. Cæsarean section was at once performed, and an asphyxiated full-time child extracted; artificial respiration was performed, but the infant died shortly afterwards. The post-mortem examination revealed a cervical rupture and retroperitoneal hæmatoma on the right side; there was a rupture also on the left. A microscopic examination revealed nothing. The attendants were therefore reduced to the conclusion that the defæcation was the ætiological factor.

Hr. Martin related particulars of the case of a 19-para. who had always had natural labours. On changing her into another bed, sudden collapse and death took place. It had been assumed that spontaneous rupture and fatal hæmorrhage were the cause of death, as nothing but a foot and part of the pelvis of the fœtus had been born.

Hr. S. Meyer showed preparations from a case of spontaneous labour in a case of myoma of the uterus. The patient had been delivered of a child, but hæmorrhage came on again shortly afterwards, the uterus still reaching to above the umbilicus three weeks after the birth of the child. Later on the hæmorrhage again returned, and the patient became jaundiced. The X-rays were applied, but in spite of this the bleeding came on again. Total extirpation by the abdominal route was performed, when a bleeding myoma, the size of the fœtal head, was removed. The Röntgen rays had completely failed in the case.

At the Verein Deutscher Laryngologen, Hr. Schmeden reported on 43 cases of

Infection of Human Beings by Foot and Mouth Disease

through cattle. All the cases occurred last year, and in the Oldenburg district. The symptoms consisted in a general febrile condition, with disturbances of digestion and the appearance of vesicles in the mouth, which soon ruptured. In some cases there were bullæ on the hands or feet. The cases, on the whole, ran a favourable course, but a fatal termination took place in one.

Hr. F. Siebenmann related a case of

Injury to the Head as the Cause of Simultaneous Paralysis of the Œsophagus, Larynx and Neck.

On inquiry into the literature of the subject, he had collected a total of nine cases in which there was a similar relation between the injury (fracture of the skull) and the symptoms. In three other cases recorded there was no paralysis of the neck. On consideration of the symptom-complex determined by Wiedmer and Reich, after severing of the vagus, he had come to the conclusion, taking into consideration the clinical course of his own cases, that Aveli's syndrome was caused by total and simple division of the vagus, and by that alone, but that the so-called Schmidt syndrome was set up by division of both the vagus and spinal accessory nerves. The accessory nerve, as it passed out from the head and into the jugular foramen, possessed only a motor function, and that only for the external skin muscles, the sterno-cleido and the cucullaris. The fact that in about one-half of the cases sensibility was retained on the paralysed side was explained by the further fact of the crossing over from one side to the other of the sense terminations of the sensory terminal fibres of the vagus. The same would be the case for the fibres for the special sense of taste of the glosso-pharyngeal.

AUSTRIA.

Vienna, Aug. 24th, 1912.

The Circulatory System and Salvarsan.

Dr. Karl Wagner, of Graz, has observed peculiar pathological changes in the blood-vessels of two patients who died after Salvarsan injections, but not in consequence of these. (One died of pneumonia 3 months after the Salvarsan injection was made, the other died of typhoid fever 7 months after Salvarsan). Meditating on these cases, Dr. Wagner came to the conclusion that knowing Salvarsan to be capable of producing inflammation in the muscles, when given intramuscularly, it would be absurd to assume that it would not damage the fine *intima* of the arteries. To confirm himself about the correctness of this assumption, he made experiments on animals (rabbits), and he actually found that Salvarsan causes inflammatory changes on the *intima* of all the pectoral and intestinal blood-vessels, the inflammation being noticeable even with the naked eye. In one of the rabbits he found an endocarditis (at some spots a verrucous one), the most attacked part of the *intima* being the *ossium atrioventriculare dextrum.* From these experiments he concludes, that (1) it is quite certain that Salvarsan acts harmfully upon the *intima* of the blood-vessels. (2) The degree of damage done depends upon the amount and concentration of the Salvarsan solution. (3) The usual dilution of Salvarsan suffices to prevent severe changes in the vessels, although thrombosis of one femoral vessel, and such like, have already been reported. (4) If changes can be found months after the injecting of Salvarsan, then the more rightly can we assume that several days after such injection the inflammatory changes are more pronounced. It is to be admitted that with the evacuation of Salvarsan from the organism, also when the reaction on the blood-vessels ceases, the inflammation diminishes in intensity.

New Radium Institute in Vienna.

The first Radium Institute—established for instructional purposes—has been recently opened here. For the time being the Institute is located in the court of the General Hospital (Allegemeine Krankenhaus). *Radium carriers*, small, round brass boxes, mounted with radium salts, are conveyed from here in various sizes and forms into the different clinics. Besides this, at the Institute radium emanation is produced in a large quantity, and distributed among the sections of the hospital for curative purposes. The emanation is used in the form of drink, inhalation, and bath cures. Private practitioners may obtain radium salts from the Institute for a pay of 30 kronen (25 shillings) per half-day. The emanation is sold in drug stores at fixed prices. All the drug stores and hospitals, which use radium salts or emanation, stand under the control—as regards radium application—of the Royal and Imperial Radium Station. The station is under the management of Professor Riehl, the well-known dermatologist.

Appointments.

The adjunct at the Serotherapeutic Institute in Vienna, Dr. Ernst Pick, has been appointed as extraordinary professor of applied medical chemistry.

Dr. Rudolf Matsenauer, extraordinary professor of dermatology and syphilography at the University of Graz, has been appointed as ordinary professor on the same subject.

Dermatitis Exfoliata.

At the Gesellschaft für Innere Medizin, Zarfl reported that the child which he showed them a few weeks ago suffering from dermatitis had since died. This was a case of an infant with a peculiar history and irregular course of development. The affection commenced not with erythema as usual, but with a crop of " miliaria crystallina " which rapidly spread over the body raising up the epithelium. The child seems to have been infected by the mother, as her breast was covered with dermatitis and large pieces of the epidermis peeling off. Leiner thought at that meeting that the case was one of pemphigus neonatorum. In the discussion that followed Knöpfelmacher said he considered there was very little difference between pemphigus and epidermolysis to which he thought this belonged. Although the exudation under the skin commenced slowly it gradually increased, spreading extensively, but never forming the characteristic vesicles of pemphigus. In the whole course of the disease no vesicles appeared, but the cellular tissue below the skin had a fluctuating sensation.

Tuberculosis.

Zarfl also showed another child, 6 weeks old, with congenital tuberculosis. When 17 days old the tubercular reaction was strongly marked with enlarged spleen and fever, which in the fourth week rose to a high degree, and in the groin and armpits the lymphatics were greatly enlarged, which reacted actively to the tuberculin injection. Pirquet considered this a case of congenital tuberculosis, but it was interesting that a child so young should respond so readily to the tuberculin reaction. Rach showed a girl, æt. 12½, with a subacute form of miliary tuberculosis, which, he said, demonstrated the cachectic type by the tuberculin reaction as the efflorescence was pale and slightly raised. The Röntgen rays revealed miliary deposit the size of hemp seed in both lungs which confirmed his diagnosis of miliary tuberculosis.

Extra-Systole.

Hecht exhibited a girl 7 years old with an extra systole of the heart and who suffered from a severe form of tuberculosis, the upper lobes in both lungs being affected and the cutaneous surface ulcerated. After a number of regular pulsations a pause occurred, followed by a strong contraction without a pulse wave, which he considered due to a detention in the periphery circulation or frustrated cardiac contraction. This extra systole may go on for years until a fever attack occurs or overstraining when it suddenly disappears.

Pseudo-tetanus.

Lüchler reported a case of pseudo-tetanus he had shown at a former meeting that was now comparatively well. All the muscles of the body with the exception of the diaphragm were in a perfect state of tonic contraction, the upper extremities and eyes sharing in the same fixed condition which lasted eight days, being only slightly relaxed during sleep. Throughout the whole course the symptoms of genuine tetanus were not present as the reflex action was quite active and no history of traumatic neurosis could be obtained.

SWITZERLAND.

Berne, Aug. 24th, 1912.

Insurance against Sickness and Accidents in Switzerland.

In our neighbourland, Switzerland, insurance against sickness has been undertaken only heretofore by private concerns, while insurance against accident was the privilege of insurance companies. However, as this system has not stood the test of time, in 1890 the Government was obliged through the national vote to order the insurance of workmen according to a special law. The plan of the bill, however, was rejected, because it established compulsory insurance against sickness and accidents. The Government, therefore, had to elaborate a new bill, which entirely dispenses with compulsory insurance, and the proposal has been, so to say, unanimously accepted this year.

According to this new bill (*Bundesgesetz ueber die Kraken- und Unfallversicherung*), every Swiss citizen may become a member of the Sick Club, without regard to his income or means. There is no compulsory joining, but the law empowers the single cantons with the right of introducing in their own territory compulsory insurance, either for a certain class of people or for the whole population. The cantons may empower single villages or towns with such right. The administration of insurance is done by the former companies, and for their work they get State support. Switzerland, like England, is of the opinion that the State cannot restrict its activity merely on the making presents of paragraphs, but it must also bring pecuniary sacrifices too. This sacrifice amounts to 4½ to 5 million francs yearly, an enormous sum considering Switzerland's small revenue. The number of insured persons will amount to 800,000.

The insured persons are entitled to free medical attendance, free medicine, and at least one franc support in case of incapacity to work. This support cannot be given on more than 180 days a year.

As to the relation of doctors to the sick clubs, the law declares (in principle) the free-choice system, which permits the single clubs to make contracts with single doctors or medical associations, too. The bill is very liberal towards the medical men and chemists and instructs the clubs, that representatives of the clubs, together with the committees of medical and pharmaceutical associations, shall establish the rights and duties of doctors and chemists, and shall agree as to the lowest and highest medical fees, and the lowest and highest prices of drugs. In disciplinary or disputational questions an elected court shall decide. The bill has a very important paragraph ; nominally it says that if from any reason no contract could be made with doctors or chemists, in that case the sick clubs are allowed, for at most one year, to endow the members with monetary compensation instead of medical attendance or drugs, respectively.

As to the insurance against accidents, this is carried on by the newly-to-be-established " *Schweizerische Unfallversicherungsanstalt*," in the directorate of which, probably, doctors too will be enlisted. The members incapacitated through accidents will be attended by the sick clubs, inasmuch as it does not last longer than 6 weeks, and for their service they get agent's premium, and get the quota of the State subvention.

UNITED STATES OF AMERICA.

New York, Aug. 18th, 1912.

National Public Health Department in the United States.

For some time there has been a strong sentiment in the United States in favour of the establishment of a national public health service. Had it not been for the bitter opposition of those interested in proprietary and patent medicines, who, owing to the possession of a very large amount of money, and who in consequence wield an immense amount of political influence, it seems more than likely that a national public health service would have been in existence ere now. By means of money judiciously expended a prejudice has been created to some extent against the medical profession, and the proposal has been stigmatised as a scheme to bring into being a "doctors' " trust. However, in support of the plan are men of weight in all classes of society, and legislation to this effect will probably be introduced in the near future. In connection with this matter a Senate document on the subject of conservation of human life has been widely distributed recently by Senator Owen, of Oklahoma. The material for it was prepared by Professor Irving Fisher, of Yale, and Miss Emily Robbins, of New York, representing the Committee of One Hundred on National Health. The statistics and statements in this document go to show that the annual financial loss to the United States by its failure to properly conserve human life amounts to $3.000,000,000 (£600,000,000) Acute diseases are held responsible for a considerable part of this loss, while to chronic diseases is attributed the greater part of the waste of life, and, moreover, these are said to be increasing. Minor ailments, for the most part thought to be preventable, are at the present time costing the nation very large sums, owing to the incapacitation of persons thereby and through leading to serious illness. Industrial accidents, also largely preventable, are exacting a heavy annual toll. It is asserted that the only effective manner in which this wastage of life, with its national economic consequences, can be modified is by national action.

The following are some of the reasons advanced in support of the proposal to establish a great national department of health. The work of the department would be varied, and would include direct work in promoting health on the part of the Government, such as administering the Food and Drug Act, aiding the healing and educational agencies, both city and State, obtaining information concerning the cause and prevention of disease, and disseminating scientific information on all health subjects. Many startling statements are set forth in the document, which is, of course, designed to arouse public interest in the question. For instance, Dr. Charles Wardell Stiles, of the Public Health and Marine Hospital Service, declares that the United States is seven times more dirty than Germany, and ten times more so than Switzerland. He asserts that lack of interest in preventive measures against disease is slaughtering the human race. He takes the stand that race suicide is not so great a menace as race slaughter, and that it is rather a case of too many children being allowed to die than of enough children not being born. It is estimated that tuberculosis alone costs the United States $1,000,000,000 (£200,000,000) annually; while Dr. George M. Kober estimates that typhoid fever causes the nation a financial loss of $300,000,000 (£60,000,000) a year. With regard to acute diseases, this statement is made: "The loss from tuberculosis has been reduced to half of what it was thirty years ago. Nevertheless, of the 90,000,000 people now living in the United States, at least 5,000,000 will be lost through this disease because adequate effort is not put forth to prevent it. Besides the economic waste through deaths from any disease, the waste through sickness of the same disease is also colossal."

Further statements are as follow. Great as are the reductions of the rates of infant mortality by means of improved milk and water supplies and by educational campaigns, the rate is still enormous. While the death rates from acute diseases have been greatly reduced, the rates from chronic diseases have been increasing steadily. Cancer is one of the chronic diseases apparently on the increase. Finally, the assertion is made that the annual death roll and the 3,000,000 constant sick beds could be reduced by one-fourth to one-half by the institution of proper measures. It is to be hoped that the widespread distribution of such facts may have the effect desired, although it must be granted that those opposed to national control of the health service are very powerful, and will use every effort to prevent legislation that will clash with their interests. It may be observed that the very excellent U.S. Public Health and Marine Hospital Service now fulfils many of the functions of a national health department. Indeed, some of the medical journals, prominent among these being the *Medical Record*, urge that the scope of service of this capable body of men should be enlarged, and a public health department created in this fashion.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

BELFAST.

The Insurance Act.—A meeting representative of the medical practitioners of Co. Tyrone was held in Omagh last week, Dr. E. C. Thompson presiding. A resolution pledging those present to adhere to the resolutions of the Conjoint Committee in Dublin was proposed by Dr. Lyle (Newtownstewart), seconded by Dr. Burgess (Coagh), and passed unanimously. The Local Medical Committee of County Antrim met at Ballymena on the 16th inst., Dr. A. D'Evelyn, J.P., presiding. Dr. Gawn, J.P. (Antrim), was appointed vice-chairman, and Dr. Davison (Ballymena), honorary secretary. It was decided to enlarge the Committee so as to include all those in active practice in the county, and to appoint an executive committee of six representatives from the six unions of the county, with the chairman, deputy-chairman and honorary secretary. In connection with the appointment of a superintendent tuberculosis medical officer for the county, the Committee have informed the County Council of their objection to the scheme proposed, the salary not being sufficient to attract a good man, and the work (including attendance at ten or eleven scattered dispensaries) more than any one man could do efficiently. At a meeting of the County Monaghan Health Insurance Committee held on the 21st August, an important question was raised as to whether sanatorium benefits could be bestowed on persons who were not insured. It was pointed out that the large majority of householders in the county were small farmers, who would not be insured. The Local Government Board was interrogated upon this point and replied that under the Act of 1908, all inhabitants of the county could be treated. As this Act is not in force in Co. Monaghan, steps were at once taken to bring it into force.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE BRITISH POPULATION QUESTION.

To the Editor of The Medical Press and Circular.

Sir,—Your leader of to-day, August 21st, on "The French Population Question" ends with the following sentence: "The result of the enquiry by the new Commission cannot be without importance to the people of these islands, seeing that our present falling birth-rate, if continued, will bring us within a very few years into a position exactly similar to that of our neighbours." This statement gains point and emphasis from the Registrar-General's Annual Summary, which also is published to-day. The birth-rate in England and Wales, having fallen steadily for years, has been during 1911 the lowest ever recorded. The cause is the same as that in France—married couples are more and more declining the burden and responsibility of child-rearing. We are now within a measurable time-distance of a numerically stationary population. It seems evident that what you rightly style "a gigantic system of artificial selection" is pretty certain to evolve an inferior stock unless based upon true prudence and guided by exact science. It seems also evident that unless these islands can go on producing an exuberant population, equal physically, mentally, and ethically to the best among civilised peoples, our competitors for the dominion of the world, the British Empire is doomed to destruction. The Prime Minister of New South Wales, in a speech a year or two ago, declared that unless they could fill their lands with people of their own blood, they would not for long be able to call Australia their own. Australasia is as big as Europe. Including New Zealand, it contains less than 6,000,000 inhabitants. With a properly organised imperial system of emigration this Dominion alone could easily receive and absorb the whole of our normal increase, say, about 500,000 annually. But besides Australasia we have Canada, Africa, equal to about two more Europes, not to speak of the West India Islands, and other vast domains, tropical or sub-tropical, which, with the extinction of their special climatic diseases, are becoming more and more fitted, especially in their highlands, for people of European blood. If neo-Malthusianism led to improvement in the breed the harm would be no doubt lessened, but it would be easy to show that this cannot be the result so long as the system is carried on regardless of science, and with no consideration save what is based upon the narrowest form of egoism.

I am, Sir, yours truly,
A Student of Sociology.

August 21st.

A DOCTOR'S WIFE ON SECRET DRINKING.

To the Editor of The Medical Press and Circular.

Sir,—Your manager can tell you that my husband is among your oldest subscribers, but neither he nor you can be aware that I am one of your most constant readers. During all the years I have been on terms of friendship with considerable numbers of patients, and although I resist the temptation to write, I have often the opportunity of viewing matters from behind the scenes of domestic life which, if described, might not be without value to many family practitioners. In your leader this week on "Alcohol and Tobacco," I was struck by the fact that you do not even allude to the question of secret drinking among women, nor refer to the facility for this vice that is afforded by the alcoholic "tonics" now so widely advertised. My attention has been recently more closely directed to this question by the work and writings of Dr. Mary Sturge, of this city. Reports of her speeches have been published, and her evidence a few weeks ago before the Select Committee on Patent Medicines was also summarised in some daily papers. I can vouch for the fact that these alcoholic mixtures are in great demand and constant use among the wealthier class of women, who are sinking or have already sunk to th level of the confirmed inebriate. These women a mostly ashamed of their vice, and are able to cloa it from husband, children and servants by taking the supply of drink under the guise of a tonic. On t other hand many simple women are taking these p nicious compounds, and administering them to t children, without the least suspicion of the harm th are doing. It seems to me that if there are no oth- secret remedies the sale of which calls for regulatio by Government the class to which I refer do, at an rate, urgently demand attention by Parliament. enclose my card and am,

Sir, yours truly,
A Doctor's Wife.

Birmingham, August 23rd.

TURKISH BATHS AND THE SHOPS ACT.

To the Editor of The Medical Press and Circula

Sir,—My attention has been called to the reference i your current issue to the conditions of employment o Turkish Bath attendants; you appear to think that the are a body of rather ill-treated men and women, and that their circumstances call for some amelioration on the lines of a recent Act of Parliament. I cannot of course speak for the Baths other than those under my control, but I believe the conditions obtaining in our establishments are practically similar to those in vogue throughout the trade. Our shampooers and cooling-room attendants have for years enjoyed greater relaxation than would be accorded if the Act were put into force and they have many other privileges with which it does not seem necessary to trouble you.

Their occupation is as you admit, a healthy one, and though their hours of duty if compared with those of some of the constructive trades would appear to be long, if they are contrasted with the ordinary hours of a shop assistant they are the reverse. Our people earn a very liberal remuneration, they are quite happy and comfortable in their employment.

I am, Sir, Yours faithfully,
Turkish Bath Manager.

[We are glad to publish our correspondent's letter and to learn that the conditions of employees in the establishments under the control of one company, at any rate, are satisfactory.—Ed. M.P. and C.]

ADVERTISING THE INSURANCE ACT.

To the Editor of The Medical Press and Circular.

Sir,—Having had leaflets innumerable explaining the supposed benefits which the worker will derive from the Insurance Act—which, by the way, is rather a contradiction of the statement frequently made that the workers were crying aloud for the benefits which will result from the Insurance Act—and now that they have obtained that for which they so ardently wished, explanation of what they desired is necessary! We have "a poster" illustrative of maternity benefits, with inset some of the great benefits of this scheme. Among these I notice free medical attendance and medicine for life. I have only one question to ask, which is, "Is this honest?" If so, I should like to hear the definition of honesty of the persons responsible for this poster. There may be a lull in the storm pending the report of the Insurance Commissioners, but of one fact we are certain, that unless our cardinal points be granted, the Act, so far as medical benefits are concerned, will be as unprolific as the barren fig tree. Possibly those responsible for this poster are taking as their motto, "Let us eat, drink, and be merry, for to-morrow we die."

I am, Sir, yours truly,
S. J. Ross.

Monkhams, Bedford, August 25, 1912

OBITUARY.

[illegible] of medical and surgical science and the amelioration of human suffering. He gave freely of his time and service to the great work of the hospitals, and was the pioneer of many reforms in the practice and methods of obstetrics generally. He contributed many valuable papers to the medical journals, and wrote a number of treatises of value to the profession. With Dr. James Niven, the Manchester Medical Officer of Health, he succeeded in launching the "Medical Chronicle," and later he undertook the larger enterprise of establishing the "Journal of Obstetrics and Gynæcology of the British Empire," with the management and editorial conduct of which he was long associated. Despite the demands of his professional calling Sir William Sinclair took an active interest in the political as well as the municipal life of Manchester. Up to 1886 he was a staunch Liberal, but, like so many others, he then revolted against Mr. Gladstone's surrender on the Home Rule question. He became a Liberal Unionist, and for nearly twenty years was chairman of the South Manchester Liberal Unionist Association. He took a keen interest in the municipal life of the city, and for four years, from 1893 to 1897, served on the City Council as a representative of St. Luke's Ward. Sir William, who was knighted in 1904, married in 1883 a daughter of Mr. Andrew Haddon, of Denholm, and they had two daughters.

MR. WILLIAM CLAPTON, OF CANTERBURY.

We regret to announce the death of Mr. William Clapton, F.R.C.S., formerly of 30, Queen Street, E.C., which took place on the 20th inst., at Rose Villa, St. Stephen's Road, Canterbury, at the age of 78. The deceased, who was educated at Christ's Hospital, received his medical training at St. Thomas's Hospital, which was then at London Bridge, where his elder brother, Dr. Edward Clapton, had preceded him. After a successful career as a student he entered upon practice in the City of London. For ten years he represented the Vintry Ward on the Court of Common Council, retiring in December, 1882. He was medical officer of the British Equitable Assurance Company, and held other important appointments. On his retirement from practice he settled at Canterbury, where he devoted himself to social and philanthropic work, in connection with the Church and with various societies and charities.

MR. E. JONES, OF LITTLE BURSTED.

By the death of Mr. Edgar Jones, J.P., M.R.C.S., which has taken place at his residence, The Elms, Little Bursted, Essex, the medical profession has been deprived of its oldest member. Mr. Jones, who was also the oldest Justice of the Peace, was in his 103rd year. He was a native of Somersetshire, and was born in 1810. He became M.R.C.S.Eng., in 1834. For many years he was Chairman of the Billericay Bench. He was formerly engaged in medical practice in [illegible]

never smoked or took [illegible]

last few years he had been perfectly normal in his diet, taking all the plain, healthy foods which came readily to an old Essex farmstead. Mr. Jones came of a long-lived family. His father died at the age of 91, and his eldest brother at 90. His sister lived to be almost a centenarian, and he has a brother still living, who is over 90.

SPECIAL ARTICLE.

TROPICAL DISEASES IN NORTHERN AUSTRALIA.

The existence of tropical diseases in Northern Australia has been somewhat minimised in the past, but expert investigation has recently shown that these diseases, though rare on the whole, cannot be ignored. The Preliminary Scientific Expedition to the district has recently issued a report to the Commonwealth Government from which it is evident that a necessary condition of effective white occupation must be the introduction of medical officers who are thoroughly trained in a knowledge of tropical diseases. As Dr. Breinl, the Director of the Australian Institute of Tropical Medicine, points out, "the number of deaths due to 'fever,' in most instances malarial fever, has been most high throughout." In 1909 and 1910 malaria accounted for 26.47 and 20 per cent. respectively of the total death rate. Dysentery also accounts for a certain number of deaths nearly every year, and in certain years epidemics have made their appearance and there has been an increased mortality on that account. Other diseases, such as beri-beri, ankylostomiasis, yaws, trachoma, and leprosy are not unknown, but so far the cases have been for the most part sporadic.

The most interesting feature of the report from the medical standpoint is the fact that the evidence contained tends to show conclusively that effective white settlement is primarily a medical problem. Despite the tropical climate those residents and their children who care to live a reasonable life, taking adequate exercise, enjoy good health. As yet there is little, if any, evidence of the effect of the climate on a third generation, and it would be necessary to take this generation into consideration before a dogmatic statement on the subject could be made. Dr. Brienl says that life on the stations is ideal from a health point of view. The active and mainly outdoor life, the comparatively cool and dry winter, as experienced on the tablelands, are all conducive to splendid physical development and robust constitutions, granted that malaria, alcoholism, and other such deteriorating influences be avoided. During the short time that the expedition was in the district, however, they found that the most elementary precautions are not taken against the spread of malaria. The conditions in the mining settlements are such that it would prove a comparatively simple matter effectively to eliminate malaria by the recognised method of kerosining their breeding places, or by removing the mining camps from the rivers where such treatment is not economically practicable. The problem of tropical diseases, however, is a wider one than the extirpation of malaria. The conditions in the Northern Territory are such, geographically, as to expose the district to the danger of infection from the Dutch East Indies, and from China, and with the elementary sanitary arrangements that at present exist, tropical diseases, if once introduced, might easily give rise to serious epidemics. To guard against this it seems desirable that an extensive study should be made of the diseases prevalent on the lesser-known islands with a view of framing adequate Quarantine laws. That the risk is a real one is shown by the fact that one or two species of mosquitoes belonging to a genus prevalent in the East and Malay States have been found in the Northern Territory, which seems to indicate that an introduction of insects from the East has already taken place.

Dr. E. Fairfield Thomas has been appointed Tuberculosis Medical Officer to the Wrexham Tuberculosis Dispensary for the counties of Denbigh and Flint, in connection with the Welsh National Memorial Association.

REVIEWS OF BOOKS.

ACHRONDROPLASIA. (*a*)

This suggestive book, which contains a short introduction by Prof. Elliot Smith, deals with the skeletal peculiarities of the achrondroplast, and endeavours to offer an explanation as to their causation. The monograph consists, in part, of the author's observations on the skeletons of two dwarfs which have come into his possession, but he also refers to the somewhat scanty literature on the subject, and particularly to Kaufmann's work.

The disease may leave some cartilage formations untouched, and may even, in a minor degree, affect some membrane-formed bones, so that neither chrondrodystrophia nor achrondroplasia, as a name, fully describes it.

Having considered the bones of the limbs, trunk, and particularly those of the skull, Dr. Jansen concludes that the disease commences between the second and ninth weeks of fœtal life. He states that the pituitary body is only markedly affected in unviable cases. Particular stress is laid on the changes in the region of the oral and nasal cavities, and more especially on the inward curving of the alveoli, the narrowing of the choanæ and the increase in the angle between the hard palate and the basis cranii. To the latter two factors he attributes the noisy bubbling respiration often met with. The dorso-lumbar kyphosis he regards as constant, and attributes it and the changes in the nasal and oral chambers to the effects of mechanical pressure.

Dr. Jansen endeavours to prove that the cause of this rare affection is mechanical pressure exerted by the amniotic fluid, producing infolding of the fœtus and general ischæmia at a time when the cartilage is growing rapidly and requires more food than the other tissues. It, therefore, suffers most, and never recovers fully from the temporary setback; it is the later cartilage-formed parts which suffer most.

The book concludes with a consideration of the effects of pressure in causing some minor defects which may be found in association with achrondroplasia. The writer's theory is ingenious, and it will be interesting to see how far it is supported by further work. The book is excellently turned out and contains some good illustrations.

THE SURGERY OF THE HAND. (*b*)

Those surgeons who are familiar with the series of articles on the hand and its infections which have been published during the last seven years by Dr. Kanavel will require nothing more than the announcement of the publication of this volume to make them obtain it immediately. It is certainly the most noteworthy work on this subject that has appeared in recent years. Every surgeon is familiar with the immediate disaster and the permanent disability which too often follow the ordinary text-book treatment of septic processes in the hand. Those books usually at the command of the general practitioner treat infections of the hand with a brevity utterly out of proportion to their importance. Dr. Kanavel, with due regard to proportion, gives in detail essential anatomical points which are not dealt with in anatomical books. He then describes the pathological processes in this region, and finally, in the sections worthy of highest praise, describes the exact treatment for each variety of infection in each special site. We commend the author for clearness of expression, even when it is at the expense of repetition. The methods by which he arrives at his conclusions are described, and greatly add to the scientific value of the work. It is seldom that we can give such unalloyed praise to a book, but this is a volume which every practitioner should possess and which no surgeon could read without profit.

SURFACE ANATOMY. (*a*)

The present edition is really a reprint of the fourth one, which we reviewed some time ago. Many of the illustrations, however, have been improved, and in some a judicious use of colour is made, this throwing the parts, especially the arteries, more into prominence. The illustrations are now very good, and give the student a clear idea of the relative position to the surface of the underlying parts. The subject matter is concise, but yet sufficiently full for ordinary use. We can heartily recommend the present edition as one of the best books of its kind for students' use.

THE TREATMENT OF SHORTSIGHT. (*b*)

Dr. Lindsay Johnson is to be thanked for making available to English-speaking medical men in their own tongue the short but extremely important monograph by Professor Hirschberg on the Treatment of Shortsight. The book runs to 120 pages only, but it affords space for some discussion of the ætiology and prognosis, as well as the treatment of shortsight. The statistics of his own cases make the author's right to speak with authority quite clear, if there were any doubt on the point; his experience is simply enormous.

Professor Hirschberg's views on the prescribing of glasses frequently differ from those commonly taught in English schools. He is very sceptical about the existence of accommodative spasm. In low grades of myopia, between 0.75 and 3D, he gives full correcting glases for constant wear; in medium degrees, from 3.5 to 6D, entirely or nearly correcting glasses are given for distance, and weak glasses or none at all for near work. In higher grades, 6D and upwards, two pairs should always be given, one for distance, not more than 8 or 9D generally, and another pair for near work, about half as strong, or a little more. In cases of very high myopia, stronger glasses than 9D may be given in a lorgnette for occasional use, not to be worn constantly.

The changes in the media and fundus of the myopic eye are very fully described, as is the seldom-mentioned subject of myopic glaucoma. That frequent complication of high myopia, detachment of the retina, is discussed at length, and the author's dictum is:—"The facts speak loud and clearly, the theories are debatable, the treatment risky, the cure rare." Very early recognition and treatment by rest offer, he thinks, the only real hope of cure.

Treatment of shortsight by removal of the lens does not much commend itself to the author, and he seems to have given it up, in spite of some very good results. In any case it is only to be considered in specially favourable cases with over 15D of myopia.

Professor Hirschberg is strong on the point that no school child should wear spectacles unless prescribed by a doctor.

A few misprints may be pointed out:—p. 24 "revolution" should read "resolution"; p. 45 "for the worst" should read "for the worse"; p. 49 "by" is used instead of "with," and the sentence "Many surgeons etc.," is split in two; p. 96 "almost" should read "at most." One wonders why a book translated by an English surgeon and published in London should offend us with such words as labors, hemorrhage, macula region (for macular region), but probably "Printed in U.S.A." accounts for this. These, however, are small blemishes, and one must congratulate

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(*a*) "Achrondroplasia, Its Nature and its Cause." By Dr. Murk Jansen. Demy 4to., pp. viii. und 98. Illustrated. London: Bailliere, Tindall and Cox. 1912. Price 6s. net.

(*b*) "Infections of the Hand. A Guide to the Surgical Treatment of Acute and Chronic Suppurative Processes in the Fingers, Hand and Forearm." By Allen B. Kanavel, M.D., Assistant Professor of Surgery, North-Western University Medical School; Surgeon, Wesley and Post-Graduate Hospitals, Chicago. Pp. 447. Illustrated with 133 Engravings. London: Baillière. Tindall and Cox. 1912.

(*a*) "Landmarks and Surface Markings of the Human Body." By L. Bathe Rawling, M.B., B.C.Cantab., F.R.C.S.Eng. Fifth edition. Demy 8vo., pp. viii. and 96. Thirty-one illustrations. London: H. K. Lewis. 1912. Price 5s. net.

(*b*) "The Treatment of Shortsight." By Professor Dr. J. Hirschberg, Berlin. Translated by G. Lindsay Johnson, M.D., F.R.C.S. London: Rebman, Ltd.

author and translator on one of the most interesting and useful ophthalmic books that has appeared for years. No ophthalmic surgeon unless he has reached the age when his views and methods are rigidly fixed, can afford to neglect a study of it, and few will study it without pleasure and profit.

OPHTHALMOLOGY. (*a*)

THE first volume of a textbook of ophthalmology in the form of clinical lectures by Profesor Roemer of Greifswald, translated by Dr. Foster of New York, is an interesting book, specially to those engaged in clinical teaching. It is an attempt to discuss eye diseases as in the clinic; the idea is to give a definite clinical picture of a disease, and then discuss its variations. This first volume contains 275 large pages closely printed, but owing to the colloquial and diffuse style, there is not so much matter in it as one would expect. There is a great amount of repetition, and yet many important points are entirely omitted. For instance, four pages are given to the treatment only of phlyctenular ophthalmia, and four to diabetic cataract, and on the other hand, in discussing cataract operations generally, no mention is made of irrigation, and Colonel Smith's operation is only mentioned in a translator's footnote. The superficial diseases receive the more detailed consideration all through. No less than nine types of corneal ulcer are described: the account of pneumococcal ulcer is excellent, as is also the lecture on corneal opacities resulting from ulcer and other causes, but the names are rather trying. Phlyctenular ophthalmia is called keratoconjunctivitis eczematosa; it is attributed to the habitus scrofulosis, and that again is discussed under two forms, the torpid and erethistic types. As regards the important part played by the translator, he seems to have been over-anxious to be literal, and to include everything. A discussion on the relative merits of the North Sea and the Baltic for sea bathing is rather futile in a book for English and American readers, and references to the Austrian pharmacopœia without a note as to the drugs mentioned, seem out of place. But our chief complaint is the treatment meted out to the Anglo-Saxon tongue. What can one say of a man who, wishing to say that the retina is healthy, says its "functionates normally"? As we have said before, American authors should be compelled to undergo a preliminary training in reading the Bible and Shakespeare, to prevent such atrocities. On the whole, the book is worth study by teachers, but it is unsuitable for students, and will not take the place of the ordinary systematic manual. The illustrations, specially the coloured plates, are excellent.

SURGICAL OPERATIONS. (*b*)

THIS volume, which is somewhat more than a handbook, gives a very concise and accurate *résumé* of modern German surgical teaching. In fact, we would prefer the author to give more details of his own procedure and *technique* rather than to describe the operations as performed by other surgeons. In a moderate space the conciseness of the author has made it possible to give the essential details of a large number of operations with greater completeness than in the ordinary text-book. We are glad to see that the complications of anæsthetics are clearly described and the necessary measures for relief indicated. The *technique* of lumbar puncture and the administration of spinal anæsthesia is adequately dealt with. The chapter on thoracic operations is good, as it shows what has been done in the operative surgery of this region, though it sometimes leaves us in doubt of how to do it. The introductory chapter deals with antisepsis and anæsthesia, and the following sections with the blood-vessels, the extremities, the head, neck and chest, the abdomen and the genito-urinary organs. The illustrations and diagrams are very useful, and many things are figured which are not usually thought worthy of a picture, but which increase the usefulness of any text-book to a very great extent. The translation, as well as the spelling, might have been better, but the book as a whole accomplishes its object as an excellent handbook for students and practitioners.

OPERATIVE MIDWIFERY. (*a*)

WE are satisfied that Dr. Davis, well seconded by his publishers, has produced a work which will live and give pleasure to many obstetricians. After a general introduction, the volume is divided into four parts, the first on the Surgery of Pregnancy, the second on the Surgery of Labour, the third on the Surgery of the Puerperal period, while the concluding part is a treatise on the Surgery of the Newborn.

The text has been compiled with great care. Each subject of operative interest is included and explained. There is no padding, and the operations in general use as well as those which have been more recently evolved are made easy for those who have not had the good fortune to witness or perform them. The illustrations are excellent, and the author is no doubt wise in including many of the best illustrations from other text-books. More than one hundred are taken from the works of Bumm and Dr. Munro Kerr. Regarding the latter, we must feel a certain amount of elation on finding the illustrations from a British author's work in an American text-book; far more often is this compliment reversed. The beautiful series of pictures on Ectopic Gestation which accompanied Ladinski's monograph on the subject in the *American Journal of Obstetrics* is placed before us. The bibliography is excellent, and we cannot imagine a more thorough reference index for the writer on subjects of obstetrical interest. For this alone, apart from its other fine properties, Davis's "Operative Obstetrics" should find a resting-place in the library of every obstetrician.

TUBERCULIN TREATMENT. (*b*)

IN the new preface to the English edition of this work, the author states that the great need of many practitioners is a "sufficiently intimate knowledge of the complicated factors concerned in the cure of tuberculosis and the action of tuberculin, as they often assume that these are simple immunising actions. From such a shallow study there results not only bad choice of cases for tuberculin treatment and faulty *technique*, but also a lack of accuracy in judging the results. This lack of judgment can never be supplied by statistics and leads to aimless and unscientific experimenting with all possible kinds of tuberculin, resulting only in false conclusions." The reader will find here a succinct account of the mode of action of tuberculin in general and the principles of tuberculin-therapy. Dr. Sahli has chosen Beraneck's tuberculin for discussion throughout, but the broad outlines of the treatment hold *mutatis mutandis* for all tuberculins. The first portion of this instructive handbook deals with the practical part of the subject, and we notice that the author believes strongly in the value of tuberculin in the initial, afebrile cases of tuberculosis. The great advantage of the treatment at this stage is that all the signs of improvement, etc., can be noted and checked while the patient is still pursuing his ordinary

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(*a*) "Text-book of Ophthalmology in the form of Clinical Lectures." By Dr. Paul Roemer, Professor of Ophthalmology at Greifswald. Translated by Dr. Matthias Lanckton Foster, Member of the American Ophthalmological Society. Vol. I., illustrated. Rebman, Ltd. 1912.

(*b*) "Surgical Operations. A Handbook for Students and Practitioners." By Prof. Friedrich Pels-Leusden, of Berlin. Translated by Foxton E. Gardner, M.D., of New York. Pp. 726. Illustrated. London: Rebman, Ltd. Price 30s.

(*a*) "Operative Obstetrics, including the Surgery of the Newborn." By Edward P. Davis, A.M., M.D., Professor of Obstetrics, Jefferson Medical College, etc., etc. Pp. 483, with 264 illustrations. Philadelphia: W. B. Saunders Company. 1911.

(*b*) "Tuberculin Treatment." By Dr. Hermann Sahli, Professor of Medicine in the University of Berne. Translated from the Third German Edition by W. B. Christopherson, with an Introductory Note by Dr. Egbert Morland, M.B. and B.Sc.Lond., M.D.Berne. Pp. 198. London: John Bale, Sons and Danielson, Ltd. 1912.

avocation. Herein, then, lies the scope of the tuberculin dispensary. Mixed infections, it is stated, are often erroneously made the scapegoat for the imperfections of the treatment, whereas the causes of failure are rather to be sought in the absence of the natural healing factors, inability to obtain "tox-immunity," and last, but not least, an incorrect *technique*. The use of focal reactions is defended upon the ground that this method produces a local inflammatory action of the lysinised tuberculin which differs from the means of producing inflammation once employed, such as chloride of zinc, hetol, etc., in local tuberculosis, in that the tuberculin stimulates just those specific elements of the inflammatory anti-action which are essential for the cure of the disease.

The second portion of the book deals with the theory of the nature and action of tuberculin, of immunity to tuberculosis and the cure of tuberculous infection. Numerous arguments are given in support of the Wolff-Eisner theory of tuberculin action, the essence of which lies in the assumed existence in tuberculosis of an antibody of the nature of an amboceptor. According to this view, the cause of tuberculin reactions and local and general damage in tubercular infections is not the tuberculin itself, but, as Wolff-Eisner describes it, a secondary decomposition-product formed from the tuberculin by the action of a lytic antibody. A full bibliography is given at the end of this useful work which we can cordially recommend to all desirous of becoming acquainted with the methods of tuberculin-therapy. A word of praise is due to the excellent manner in which the German idiom has been rendered intelligible to English readers.

MEDICAL NEWS IN BRIEF.

The Sixth International Congress of Midwifery and Gynæcology

WILL be held in Berlin from the 9th to the 13th of September under the patronage of the Empress of Germany. Professor E. Bumm, Geh.Med. Rat. of the Charité Hospital, is President. On Monday, September 9th, the Congress opens with a meeting of the Organisation Committee, to be followed by a Festival Inauguration in the House of Parliament, when addresses from the Representatives of the Government, the Public Authorities, and the Delegates, will be given. In the evening there will be a reception in the garden of the House of Parliament, given by the German Obstetrical Society. On the following day the first and most important discussion will commence, on the "Treatment of Wounds of the Peritoneum," when the various Referees will deliver their reports, and several papers will be read. The same evening there will be a reception of the Congress by the President. On the Wednesday the discussion will be continued and that on the second subject, the "Surgical Treatment of Uterine Bleeding during Pregnancy, Delivery and Childbed," will be opened. That evening a reception will be held by the city of Berlin in the Town Hall. Thursday will be devoted to individual communications, and on Friday there will be various demonstrations by different members of the Congress at the Charité Hospital. Each morning there will be operations in the different clinics, to which all members of the Congress are invited. Dr. E. Martin, Artillerie Strasse 18, is the General Secretary.

Messrs. Thos. Cook and Son have issued a special Itinerary for British members of Congress to and from Berlin.

The Opium Question in India.

IT is reported that the Government of India have notified important changes in their internal opium policy, especially in connection with smoking and the preparation of smoking material, both of which they invite the provincial Governments, including Burma, to prohibit absolutely by legal enactment when practised in saloons or gatherings numbering more than two persons.

The Government negative the proposal to prohibit individuals from smoking as being at present impossible, and involving inquisitorial methods, but they propose to reduce the amount of opium which an individual may lawfully possess, and to increase the price of opium sold by the Government with a view to discouraging all classes from the consumption of the drug. The rules for the sale of morphia and allied opium compounds are also revised with a similar object.

Hospital Treatment for Soldiers' Wives.

UNDER War Office authority arrangements have been made for the admittance to St. Thomas's Hospital of the wives and children of soldiers on the married establishment serving in the London district. No charge will fall on the soldier in respect of this arrangement, but only cases in actual need of operation, skilled nursing, or hospital treatment generally will be admitted.

Medical Service in the Highlands.

THE Highlands and Islands Committee appointed by the Treasury to inquire into the adequacy of medical service in the Highlands opened its sittings in Inverness last week. Sir John A. Dewar, M.P., chairman, presided, and the other members present were the Marchioness of Tullibardine, Mr. J. Cullen Grierson, Mr. Andrew Lindsay, Dr. M'Vail, Dr. Miller, Dr. Leslie Mackenzie, Dr. J. L. Robertson, and Mr. Beaton, secretary. Evidence was given by representatives of the medical profession, including the medical officers of health for Inverness-shire and Ross and Cromarty, and by medical practitioners from certain of the more sparsely peopled parishes to the eastward of Inverness-shire and Ross-shire. Several of the witnesses who had long experience of country practice were able to give the Committee valuable evidence as regards the difficulties and expense of travel and the disability of many people in the poorer parts to pay fees in any way adequate to the expenditure of time and money in providing even a very modified medical attendance, and the consequent disinclination on the part of the poor but proud to call in a doctor except in the extremest cases, and often when it was too late.

The supply of doctors, nurses, and hospitals and means of communication by telephone and otherwise, and travelling facilities, and the position of the parish medical officer as regards income, residence, and security of tenure were among the subjects discussed as bearing upon the adequacy of the existing medical service. To-day and to-morrow witnesses representative of public authorities and witnesses from the general public resident in the outlying parts in the eastern portions of Inverness-shire and Ross-shire will give evidence.

The Guild of St. Luke for Medical Men.

THE annual service of the Guild of St. Luke will be held at St. Paul's Cathedral on the evening of Tuesday, October 22nd. The preacher will be the Bishop of Stepney, who is a son of the late Sir James Paget, the well-known surgeon. The Lord Mayor, Sir Thomas Crosby, M.D., will attend with the Sheriffs in State

Medical Men and the Territorial Force.

AT a meeting of the Cardiganshire Provisional Medical Committee held at Lampeter last week, Dr. J. Powell, Newcastle-under-Lyme, presiding, it was unanimously resolved to support the movement that all medical practitioners acting as medical officers to the Territorial Force be called upon to resign their commission. It was strongly felt that as the State through its Ministers intends to work the Insurance Medical Benefit in such a manner as will cripple the medical profession, medical men could not be expected to serve the State by leaving their practice to go to camp on terms which meant financial loss.

Society of Apothecaries o London.

THE following candidates having passed the required examinations, August, 1912, have received the L.S.A. Diploma of the Society, entitling them to practise Medicine, Surgery and Midwifery:—R. V. Martin, P. M. Másiná, M. M. Patterson, J. E. Robertson-Ross and B. W. F. Wood.

SUMMARY OF RECENT MEDICAL LITERATURE ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Removal of Superfluous Hairs.—Boldt (*Journ. Amer. Med. Assoc.,* July 13th, 1912), points out the distress of mind which is caused to many women by the growth of superfluous hair on the face. He believes that in many instances this is caused by some abnormal condition of health, and it is found much more commonly in unmarried women than in those who are married; indeed, sometimes the hair disappears after a successful pregnancy. Various toxæmias of intestinal origin also appear to be a prolific cause of this overgrowth of hair. In spite, however, of the most careful medicinal treatment, a certain number of patients remain for whom operative removal of the hairs appears to be the only satisfactory treatment. For this purpose, Boldt recommends electrolysis, and states that in his experience, one can by this method permanently remove the hairs without pain and without scarring. The method of procedure is as follows :—The area to be treated is thoroughly mopped with absolute alcohol, which, besides dehydrating the skin, tends to remove the sebaceous plugs from the follicles. The needle must be fine with an olive point, so that the shaft may be of a smaller diameter than the point. The needle is inserted into the follicle beside the hair, and a current from ½ to 1 milliampere passed, and the hair is epilated as soon as it loosens. When the hair is removed, the point of the needle is pressed directly on to the papilla, and in this way a much more limited cauterisation is efficient for its destruction than if an attempt was made to do this with the hair *in situ*. If the skin shows any urticarial irritability to the electrolysis, treatment should be postponed. Hairs closely grouped together should not be removed at one sitting, nor should the remaining hairs be treated till all reaction from the previous electrolysis has passed off. This is a matter of the very greatest importance in the prevention of scarring. K.

Treatment of Ringworm.—Sequeira (*School Hygiene,* August, 1912), describes the method which he has adopted for the treatment of this disease by depilation with X-rays. The hair is cut close all over the head, and the distance from the margin of the hair in front to the nape of the neck is measured with a tape. At the mid-point of this line a cross is marked on the scalp with a blue pencil, and five inches in front of this another cross is marked, and also five inches behind the mid-point. On each side, just above the ear, another cross is made, which should be five inches from the centre point and five inches respectively from the anterior and posterior crosses. The X-ray tube is enclosed in a lead, glass, or metal shield with a wide circular opening. To the margin of this opening are attached three wooden pegs sloping towards each other. To make the exposure, the pegs are placed on the scalp so that the cross is exactly in the middle of the points where the pegs impinge. This ensures that the scalp is at the proper distance from the anode of the tube. The rays are passed till a Sabouraud's pastille, placed exactly midway between the anode and the scalp, changes to its proper orange tint. The process is repeated at each of the five points marked on the scalp, and so the entire scalp receives an equal radiation of the desired strength. With a good tube it is possible to complete the treatment of the entire scalp in 45 minutes, and in from 14 to 21 days the area so exposed becomes denuded of hair. During the period of the shedding of the hair, the scalp is washed each day and a dilute nitrate of mercury ointment rubbed in to prevent infection. From January, 1910, to May, 1912, 1,063 patients with tinea have been treated at the London Hospital by this method, and in no case was there permanent alopecia or any X-ray dermatitis produced. In view of the supposed danger to the brain that may follow this treatment, Sequeira has made a careful investigation of the after-condition of many of the children, and "no single case is reported of any deleterious effect on the mentality of the children." Microscopic examination showed that 89.8 per cent. of the patients were infected with microsporon tinea and 10.2 per cent. with endothrix. K.

Transplantation of Rib for Depressed Deformity of Nose.—Hays (*Med. Record,* June 22nd, 1912) reports that his patient, a young woman, had a typical saddleback nose, and examination showed a total destruction of the nasal bones and the septal cartilage. The tip of the nose was held down by cicatrices. The deformity occurred during adolescence. Wassermann's reaction was negative. An incision three-quarters of an inch in length was made between the eye-brows, and was deepened down through the subcutaneous tissues, and a blunt dissection made to the tip of the nose with a periosteal elevator. The dissection was made outwards for some distance, to make plenty of room for the insertion of the rib. A piece of the ninth rib, about two and a half inches from its anterior end, was removed sub-periosteally, as it is unnecessary to transplant the periosteum. An incision was made through the periosteum of the frontal bone, and a dissection made between it and the bone for a distance of half an inch. The piece of rib was split down its entire length, the medullary tissue scraped away, the outer shell alone being used and inserted down to the tip of the nose, and the upper end slipped in between the periosteum of the frontal bone and the bone itself. The subcutaneous tissues were united to the periosteum overlying the rib and the skin united over this. The recovery was uneventful, and the cosmetic result excellent. S.

Stricture of the Right Ureter Treated by Pyelo-Ureterostresis.—Kilvington (*Australian Med. Journal,* March 23rd, 1912) operated on a girl, æt. 20, with apparently a dilated and painful gall-bladder. A large cyst was found lying posterior to the duodenum, and containing yellow fluid. It was evidently an extremely dilated renal pelvis, with an obstruction at the opening of the ureter, due probably to a gonorrhœal ulceration. The cyst was stitched to and drained through the anterior abdominal wall, where urine continued to come away, as the kidney itself was fairly healthy. Injections proved that no urine passed into the bladder from the right kidney. About three weeks later, the ureter was divided and implanted into a new portion of the renal pelvis by an anterior abdominal route, in the following way. The eye end of a probe was passed through the abdominal sinus into the renal pelvis, and made to impinge against its lowest part, which was opened. A silk thread was passed through the wall of the ureter, and then threaded through the eye of the probe. When the probe was withdrawn, the ureter was pulled into the renal pelvis, and secured by catgut stitches. The silk attached to the ureter was tied over a tube lying on the abdominal wall, thus taking some of the strain off the catgut sutures. For three months about equal quantities of urine passed through the sinus and into the bladder. A catheter was passed with some difficulty up the right ureter to dilate the obstruction. Soon after that the fistula closed. Three months later, the patient was free from pain, and passing 50 to 55 ounces of urine daily, and the fistula remained closed. The failure of urine to pass down the newly implanted ureter was probably due to the flap of ureter drawn inside of the pelvis acting as a valve. When this redundant flap shrank in size, its valve-like action would disappear. S.

Migrations of a Foreign Body.—Salles (*Med. Review,* July, 1912) reports the case of a girl, æt. 2, who suffered for a week from a cough. There was a swelling like a boil on the left side of the chest, presenting a whitish point like a drop of pus. On attempting to wipe this away it was felt to be resistant. The writer grasped it with a forceps, and withdrew a 7 cm. straw with an ear 4 cm. long. Eight days before the child had visited a straw-worker, and swallowed the foreign body. After the removal of the straw, there was a slight gush of pus, and the air entered and was expelled from the cavity with each respiration. No complications followed. The straw appeared to have traversed the mouth, air passages, lung, and both layers of the pleura to the chest wall in a week, without causing much disturbance to health. S.

Cystomata and Torsion of Tube with Six Months' Pregnancy.—Marshall (*Journ. Obs. and Gyn. Bt. Emp.*, xxi., 5) reports a case in which the symptoms pointed to hydronephrosis, and it was at first diagnosed as such owing to the tumour being situated in the upper quadrant of the abdomen, and the upper pole passing up under the right costal margin; the lower pole was defined about the level of the umbilicus, the tumour extending to the iliac crest. The daily secretion of urine varied from 23 to 42 ounces. The specimen consisted of an ovarian cystoma about the size of a term fœtal head with a greatly enlarged tube with three twists upon it below the tumour. The operation was followed next day by miscarriage of a 6 to 6½ months' fœtus. F.

The Mullerian Origin of Some Broad Ligament Cysts.—Cole (*Journ. Obs. and Gyn. Bt. Emp.*, xxi., 5) reports a case with illustrations in which this origin of a broad ligament cyst is demonstrated. The cyst, about the size of a hen's egg, is seen with the ovarian fimbria beneath it. An attachment to the Fallopian tube was demonstrated, and verified by serial sections to consist of tubal tissue which could be traced from the wall of the tube up to the margin of the cyst, although the lumen of the diverticulum nowhere actually communicated with that of either the cyst or the tube. A strand of tissue found stretched over the posterior wall of the cyst showed regular spaces, obviously representing the parovarian tubules cut across. F.

A Note on Early Rising after Cœliotomy.—Wallace (*Journ. Obs. and Gyn. Bt. Emp.*, xxi., 5) records his experience during the past three years, and observations of 283 patients who were allowed up on or before the 10th day, the most popular day being the 7th. The patients are allowed to move about the ward, but are not discharged before the 15th day. He almost invariably employed Pannenstiel's transverse incision using iodised catgut for closing, and does not think that the vertical incision would be sufficiently firm to allow an early rising, as in the cases when the transverse incision is used. In the majority of cases the results showed an improvement as regards muscular power and appetite. A few cases developed pyrexia when allowed up, one perineorrhaphy developed secondary bleeding, and three cases developed post-operative phlebitis. Post-operative constipation did not appear to be influenced. F.

Rupture of Pyosalpinx as a Cause of Acute Diffuse Purulent Peritonitis.—Brickner (*Surg. Gyn. and Obs.*, xiv., 5), records a case and from the literature to date has collected 90 others, this relatively small number of cases shows this complication of a fairly common condition to be rare. Of the 91 cases, 36 were not operated upon and all died. Of 55 operated upon 35 recovered and 18 died, two not known. The results of cases show the necessity of early operation, 19 treated within 12 hours of rupture all recovered, and of 28 operated upon within 24 hours only three died, one of these after three months. In most cases the rupture was spontaneous. The condition was most often mistaken for appendicitis, more rarely for ruptured ectopic gestation, in only a few cases was it diagnosed previous to operation. In several of the cases there was a history of repeated attacks of severe pain over a period of a week, before the onset of the final attack most severe, followed by collapse and peritonitis. Unless the patient's condition is too bad to permit it the tube should be removed at the operation. F.

Umbilical Tumours containing Uterine Mucosa.—Cullen (*Surg. Gyn. and Obs.*, xxi., 5), has collected in all nine recorded cases. The most common glandular elements at the umbilicus are remnants of the omphalo-mesenteric duct. In the group under discussion the glandular elements have the histological appearance and arrangement exactly corresponding to those found in adenomyoma of the uterus, in one case the stroma was composed chiefly of non-striped muscle, in the majority the stroma was fibrous tissue with little or no muscle. These growths are benign. The nine cases are fully described and illustrated with micro-photographs. F.

NOTICES TO CORRESPONDENTS, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

SHIP SURGERY.

A valued contributor, who has had unusual experience as ship surgeon on the principal routes to all parts of the world, has forwarded us an interesting paper on "Fractures at Sea" (which will be found in another column of our present issue) writes:—"I had quite a busy time coming out with 1,200 passengers and 1,400 total souls on board. We started off with measles and diphtheria. The former I was able to get at from the outset, but the latter cropped up all the way out, the last case developing two days from Sydney. I have had as many as 2,500 souls for a week, but 1,400 during six weeks in varying climates is somewhat different, and our average surgery attendance and visiting list worked out at about 75 per diem, quite a large club practice. We had a usual quota of accidents, and altogether I quite enjoyed it."

Tiro (Barnstaple).—A preparation of equal parts of paraffin oil and glycerine has been recommended to prevent the rain upon the glass wind screens from collecting in globules, and so obstructing the view of the driver. A few drops of the preparation is rubbed over the glass as soon as the rain begins, the effect of which is that no globules are formed.

Deletus.—It is not a general, but a useful, practice for the accoucheur to wear rubber gloves while attending a woman in labour.

Mr. B. Grootes (Kensington).—We know nothing about the remedy our correspondent mentions. It is unlikely that anything really specific, in the accepted sense, has been found for the condition to which he refers.

Sight Tests in the Mercantile Marine.—A White Paper [Cd. 6,370], giving a report on the sight tests in the Mercantile Marine, was issued last week. It states that last year 7,309 candidates were examined. Of these 7,192 passed in form vision and 117 failed. Seven thousand candidates were successful in the colour vision tests and 192 failed. Of the latter 56 passed on re-examination.

AN INTENDING CANDIDATE.

The next examination for the Royal Naval Medical Service will be held at the Examination Hall, Bloomsbury, on September 30th, and following days. Forms can be had of the Medical Director-General, at the Admiralty, Whitehall.

Ex Parte (Leeds).—Accepting the facts as stated, we think that our correspondent has acted wisely.

Practical Pharmacist (Hackney).—Optical rotation is, of course, an important property to determine in the preliminary examination of the essential oils, in addition to the refractive index. There appears to be some doubt in the minds of certain workers upon the subject as to the value of the refractive index, so much so that it is debatable whether its inclusion in the next British Pharmacopœia is advisable.

Dr. P. A. (Richmond).—The researches of Dr. J. D. Rolleston go to show that the blood-pressure is frequently subnormal in diphtheria, the lowest readings being generally found in the second week of the disease. In early paralysis the blood-pressure tends to fall.

Appointments.

Davis, Edward D., F.R.C.S.Eng., Assistant Surgeon to the Nose, Throat, and Ear Department of Charing Cross Hospital.

Dennehy, John J., M.B., B.S.N.U.I., Superintendent Tuberculosis Medical Officer for the County of Waterford.

Fraser, A., M.B., M.S.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Caistor District of Lincoln county.

Gillespie, J. R., M.B., B.S.R.U.I., Medical Superintendent of the Tuberculosis Dispensary at Down County.

Green, Reginald, M.D.Durh., Medical Officer of Health to the Stroud Urban, Stroud Rural, and Nailsworth Urban Districts.

Macdonald, D. M., M.B., B.S.Aberd., Medical Officer to the Kennoway Parish Council.

Magennis, E., M.D.R.U.I., has been appointed Medical Officer to the James Street District of the Dublin General Post Office.

Murphy, Robert W., M.D., B.Ch., B.A.O., D.P.H.Dub., Assistant Medical Inspector of Schools to No. 1 District of the North Riding, Yorkshire.

Radcliffe, A. H., M.B., B.S.Vict., Certifying Surgeon under the Factory and Workshop Acts for the Garforth District of the county of York.

Redmond, T. O'Connell, F.R.C.S.Irel., Medical Officer to the Clontarf District of the Dublin General Post Office.

Warren, F., F.R.C.S.Irel., L.R.C.P.Irel., Medical Officer to the Rathmines and Pembroke District of the Dublin General Post Office.

Wheeler, W. Ireland de C., M.D., B.Ch. Dub., F.R.C.S.Irel., Medical Officer to the Central District of the Dublin General Post Office.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Corwen (Merioneth), Lisbellaw (Co. Fermanagh).

Glasgow Maternity and Women's Hospital.—Two Indoor House Surgeons at the Hospital; Two Outdoor House Surgeons at the Hospital; and One Outdoor House Surgeon at the West End Branch (this appointment is open only to Lady Graduates). Further information of W. Guy, Secretary, 146 Buchanan Street, Glasgow.

County Borough of Bootle.—Medical Inspector of Scholars and Assistant Medical Officer of Health. Salary £250 per annum. Applications to J. Henry Farmer, Town Clerk, Town Hall, Bootle.

County of Denbigh.—County Medical Officer of Health. Salary £500 per annum, and actual travelling expenses, with £75 per annum for clerical assistance. A knowledge of Welsh is desirable. Particulars of W. R. Evans, County Offices, Ruthin.

Manchester Children's Hospital, Pendlebury.—Resident Medical Officer. Salary first six months at £100 per annum, second six months at £120 per annum. Applications to Hy. J. Eason, Secretary, at the Hospital.

Brecon and Radnor Asylum, Talgarth.—Assistant Medical Officer. Salary £170 per annum, with board, etc. Applications to the Medical Superintendent.

Surrey Education Committee.—Medical Inspection of Children in Elementary Schools.—Assistant Medical Officer. Salary £250 per annum, rising to £300 per annum, with £50 per annum, out-of-pocket expenses. Applications to W. W. Finny, Secretary, County Education Office, Kingston-upon-Thames.

Govan District Asylum, Crookston, near Paisley.—Second Assistant Medical Officer Salary begins at £150 per annum, with board, etc. Applications to the Medical Superintendent, as soon as possible.

Durham County Council.—Tuberculosis Medical Officer. Salary £500 per annum, with reasonable travelling expenses in addition. Applications marked "Tuberculosis Officer." Full particulars of Harold Jevons, Shire Hall, Durham.

Children's Hospital, Temple Street, Dublin.—Assistant Physician. Applications to Hon. Secretary.

Births.

Brown.—On Aug. 19th, at Helston Lodge, Kasauli, India, the wife of Captain H. C. Brown, I.M.S., of a son.

Chesters.—On Aug. 18th, at 111, Widmore Road, Bromley, Kent, the wife of Walter Horsfall Chesters, M.B., B.S.(Lond.), of a daughter.

Green.—On Aug. 15th, at 37 Broad Street, Ludlow, Salop, to Dr. and Mrs. Edward Green, a son.

Hutt.—On Aug. 16th, at 626, High Road, Tottenham, the wife of the late Charles Edward Hutt, M.R.C.S., L.R.C.P., of a daughter.

Morley.—On Aug. 13th, at 6 Queen Street, Barton-on-Humber, the wife of E. B. Morley, M.B., B.S.(Lond.), M.R.C.S., L.R.C.P., of a son.

Marriages.

Higgs—Scott.—On Aug. 19th, at the Parish Church, Chandler's Ford, Frederick William Higgs, M.D., M.R.C.P., eldest son of Dr. and Mrs. Augustus W. Higgs, of Chelsea, to Dorothy Anderson, second daughter of Dr. and Mrs. J. Walter Scott, of Chandler's Ford (late of Tulse Hill).

Skae—Fraser.—On Aug. 22nd, at St. Stephen's R.C. Church, Blairgowrie, Harold Traill Skae, M.D., Ch.B., youngest son of the late F. W. A. Skae, M.D., F.R.C.S.E., Inspector of Asylums and Hospitals, New Zealand, to Marian Christal, only child of the late Dr. William Fraser and Mrs. Fraser, Ramsgate.

Turnbull—Stratton.—On Aug. 1st, at Manningford Bruce, Wilts, Robert Cyril Turnbull, M.D., son of Henry Turnbull, of Scarborough, to Margaret, daughter of Frank Stratton, of Manningford Bohune.

Wade—Landon.—On Aug. 21st, at St. Thomas of Canterbury, Brentwood, Essex, Rubens Wade, B.A., M.R.C.S. L.R.C.P., of Bedale, Yorks, and The Grange, Windermere, son of the late Thomas Wade, The Grange, Windermere, to Phyllis Mary Landon, younger daughter of Colonel and Mrs. Frank Landon, Red House, Brentwood.

Deaths.

Clapton.—On Aug. 20th, at Rose Villa, St. Stephen's Road, Canterbury, William Clapton, F.R.C.S., formerly of 30 Queen Street, E.C., aged 78.

Dent.—On Aug. 26th, Clinton Thomas Dent, of 61 Brook Street, W., M.C. (Cambridge), F.R.C.S., Vice-President Royal College of Surgeons, Senior Surgeon St. George's Hospital, and Chief Surgeon Metropolitan Police.

Ede.—On Aug. 25th, at Edencroft, Bramley, Surrey, Charles Ede, M.R.C.S.E., late Staff-Surgeon, R.N., aged 89 years.

Jones.—On Aug. 24th, 1912, at The Elms, Burstead, near Billericay, Essex, Edgar Jones, M.R.C.S., J.P., aged 102 years.

Scofield.—On Aug. 17th, at "Elmfield," Half Moon Lane, Herne Hill, S.E., of angina pectoris, Harold C. L. Scofield, M.B., B.Sc., C.M., son of the late W. J. J. Scofield, M.R.C.S., of Birmingham, aged 48.

Sinclair.—On Aug. 21st, at his residence, 325 Oxford Road, Manchester, Sir William J. Sinclair, M.D., J.P.

OPERATIONS—METROPOLITAN HOSPITALS.

WEDNESDAY.—St. Bartholomew's (1.30 p.m.), University College (2 p.m.), Royal Free (2 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. Thomas's (2 p.m.), London (2 p.m.), King's College (2 p.m.), St. George's (Ophthalmic, 1 p.m.), St. Mary's (2 p.m.), National Orthopædic (10 a.m.), St. Peter's (2 p.m.), Samaritan (9 30 a.m. and 2.30 p.m.), Gt Ormond Street, (9 30 a.m.), Gt. Northern Central (2 30 p.m.), Westminster (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Cancer (2 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

THURSDAY.—St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), University College 2 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), London (2 p.m.), King's College (2 p.m.), Middlesex (1.30 p.m.), St. Mary's (2.30 p.m.), Soho Square (2 p.m.), North-West London (2 p.m.), Chelsea (2 p.m.), Great Northern Central (Gynæcological, 2.30 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), St. Mark's (2 p.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

FRIDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), King's College (2 p.m.), St. Mary's (2 p.m.), Ophthalmic (10 a.m.), Cancer (2 p.m.), Chelsea (2 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), City Orthopædic (2.30 p.m.), Soho Square (2 p.m.).

SATURDAY.—Royal Free (9 a.m.), London (2 p.m.), Middlesex (1.30 p.m.), St. Thomas's (2 p.m.), University College (9.15 a.m.), Charing Cross (2 p.m.), St George's (1 p.m.), St. Mary's (1 p.m.). Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

MONDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), St. George's (2 p.m.), St. Mary's (2.35 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), Chelsea (2 p.m.) Samaritan (Gynæcological, by Physicians, 2 p.m.), Soho Square (2 p.m.), Royal Orthopædic (2 p.m.), City Orthopædic (4 p.m.), Great Northern Central (2.30 p.m.), West London (2 30 p.m.), London Throat (9.30 a.m.), Royal Free (2 p.m.), Guy's (1.30 p.m.).

TUESDAY.—London (2 p.m.), St. Bartholomew's (1 30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), West London (2.30 p.m.), University College (2 p.m.), St. George's (1 p.m.), St. Mary's (1 p.m.), St. Mark's (2.30 p.m.), Cancer (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Royal Ear (3 p.m.), Samaritan (9.30 a.m. and 2.30 p.m. Throat, Golden Square (93.0 a.m.), Soho Square (2 p.m.).

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, SEPTEMBER 4, 1912. No. 10.

NOTES AND COMMENTS.

Street Dangers and Motor Traffic.

THE recent rapid growth of motor traffic has correspondingly increased the danger to wayfarers in our public highways. In the great centres of population the toll thereby laid upon our citizens in loss of life or limb has mounted gradually to breaking strain. A certain amount of risk, humanly speaking, is inseparable from all kinds of vehicular traffic, but it has been brought home to the mind of the man in the street that the havoc wrought by mechanically driven vehicles has passed the breaking strain of endurance. Beyond a doubt the greatest danger and nuisance arises from the heavy motor omnibuses that thunder through our streets, regardless of the rights of pedestrians, reckless of speed limits, destroying the peace, the health, the very structure of the houses of those hapless persons who live alongside their selfish destructive routes. The question now forced upon town dwellers is whether this dangerous nuisance is preventable, and if so, by whose authority and in what manner should it be prevented? It is intolerable that a small knot of shareholders should be permitted to disturb the amenities of urban life in their selfish lust for dividends, which after all are drawn from the pockets of the injured parties. Moreover, the omnibus companies live only by the sufferance of the ratepayers, who by the irony of circumstances are called upon to pay for the maintenance of the roads worn out by the companies that have thus established a monopoly at their cost.

What is the Remedy?

THERE are two organisations to which the citizens may look hopefully for relief from the street motor peril, namely, the local councils and the police. In London, and in certain other large towns, the problem is complicated by the fact that municipal trams are run in opposition to public vehicles owned by various companies. There is abundant opportunity of control, however, open to the London County Council and to provincial authorities in the way of fixing routes, controlling speed, weight of vehicles, conditions of concession, and so on. Of all these things the great central evil is that of speed—upon that depends to a great extent the noise, risk to pedestrians, dangers of collision, nuisance to householders along route, in a word, it is the rock-bed fact, the core, the Alpha and Omega of this intolerable motor danger. All this may be commended to the police, who in London have issued a warning notice showing that they are making a serious effort to grapple with the evil. Drivers of motor vehicles are notified that in case of accident the question will in future be raised of the renewal of license. For a day or two after the issue of the notice there was a marked diminution of speed on the part of the motor omnibuses, which crawled along silently in streets through which they had previously raced and thundered. But their caution speedily evaporated, and they are now dashing along with the old fierce joy engendered of rapid locomotion.

Selfish Motor Omnibuses.

CAN the police control the speed limit?—if so, they will confer an unspeakable boon upon the public. The writer knows a hill in a western suburb down which the motor omnibuses thunder at a speed far beyond any safe or reasonable limit. Neighbouring houses rock and tremble as with an earthquake at the passage of each car. Ceilings crack and fall, sleep is banished, a species of pandemonium reigns outside from early morning to midnight—all for the sake of trading companies anxious to swell their dividends by working their vehicles at excessive speed. If the omnibuses were driven at moderate speed the risk and the nuisance caused by them would be reduced to vanishing point. The above mentioned street is a convenient spot for drivers to make up time, and therein lies the explanation of their apparent recklessness. Unless they complete their journey within given limits they incur the risks of fine and dismissal. It is the rules of the company in fixing their time tables with too short an allowance for route-journeys that lies at the root of this public nuisance and danger. In order to keep up to time the drivers have to force their pace—or, worst of all, to race with other vehicles. Dangerous as the practice of racing was in the case of horse-omnibuses, it waxes a hundredfold with the motor omnibus. It is some comfort to learn that the London police have taken the matter in hand, for their methods are usually thorough when once they have been roused into action. The two points we specially commend to their notice are the speed limit and the companies' time-tables. Why cannot some regulation be brought in compelling every motor vehicle to carry a whistle that sounds automatically and continuously when a certain speed has been attained? Such an appliance has been invented, and its general use would immensely lighten the problem of the control of street traffic.

The Norwich Flood.

THE month of August, 1912, will live long in history as the wettest on record in the United Kingdom. It has spelt ruin to the farmers and marred the holidays of a large section of the population, while it has wrought havoc in various other directions. The experience of the ancient City of Norwich has been appalling. The floods at one time practically cut off the citizens from the outer world. The electric light failed, whole streets were under water, houses demolished, householders rescued in boats, children and some adults drowned, and, generally speaking, the whole place given over to ruin and desolation. Fortunately the state of the weather improved somewhat the end of the week, and the waters began rapidly to abate. The natural result of this terrible experience is an inevitable aftermath of sickness, a great deal of which is due to shock, deprivation of food and exposure to wet and cold. A certain amount of enteric fever has been reported, and, in any case, might be expected in so ancient a city where the whole drainage system has been submerged and the water supply disorganised. This calamity which has overtaken Norwich suggests the desirability of investigating the engineering possibilities of the district, with a view of providing some alternative routes of water exit in flood time. The flatness of the county renders any effectual scheme one of difficulty, but something might perhaps be accomplished by the resources of modern civil engineers. At any rate, it might be feasible to construct some sort of defence in the city itself for low-lying houses. The cutting of an extra storm conduit, together with the widening, deepening, and straightening of the present waterways, will doubtless receive careful local and Govermental attention as the result of the unparalleled catastrophe which has overtaken one of the most interesting of our ancient and historic towns.

Colour Blindness at Sea.

In connection with our recent remarks on the unsatisfactory nature of the Report of the Departmental Committee on Colour and Sight Tests, we note that the document in question comes in for vigorous criticism in the September number of *The Ophthalmoscope*, amounting, indeed, almost to an indictment of the Committee's findings. Our contemporary considers the Report to be "singularly defective" on the following specific grounds:—First, because it fails to recognise that accidents caused by defective vision have happened, and do happen, at sea; secondly, because it disregards the fact that a sensible proportion of officers at sea are colour-blind and have defective form sense; thirdly, because it retains the Holmgren wool test, which has been shown to be inefficient, and which allows a large percentage of colour-blind persons to pass; fourthly, because it suggests the use of a lantern, devised by the Committee, which is unprovided with neutral modifying glasses; and, finally, because it persists in recommending the retention of examiners who are admitted to be too inexpert to employ anything like a proper appliance for the examination of colour vision. This is eminently a matter for the consideration of Parliament, and would be best raised by some one of the medical men who are members of the House.

LEADING ARTICLES.

THE NATIONAL INSURANCE ACT.

The dispute between the administrative Government and the medical profession has naturally abated somewhat in energy during the holiday season. Now that the Act is in force, however, a speedy solution of the problem must be forthcoming. A few recent events of significance in the struggle may be noted. First, the resolution arrived at by the Liverpool meeting that medical men should be free to accept posts and give service under that part of the Act relating to sanatorium benefits. The next was the resolution requesting medical men to resign their posts on the Advisory Committee: advice that has been rejected by a number of the members concerned, amongst whom are men whose names carry great weight and influence in the profession. Next comes the resignation of Dr. Herbert Jones, a member of the Joint Advisory Committee, who had previously declined to accede to the request of the British Medical Association to withdraw from the committee. The reason given for his reconsideration is as follows:—"Being a medical officer of health, I thought I ought to yield to the representations of the local doctors who advised me to resign." That explanation will appear sufficiently explicit and cogent to all who value loyalty and firm collective unity above the mere dictates of individual opinion. Right or wrong, no great purpose is possible of fulfilment by any section or class of the community unless it be by the subjection of the views of the minority to those of the majority. On this ground alone the refusal of those men, however pure or disinterested their motives, cannot be approved, inasmuch as it divides our councils on the eve of battle. To split our ranks is to play into the hands of the astute politicians, against whom the sole hope of ultimate success lies in the solidarity of our union. Dr. Jones may be congratulated, therefore, on his surrender of private views in favour of a policy deliberately adopted by the majority of the medical profession. There is much to be said for those who cannot uphold the tactics which sought to withdraw the medical element from the Advisory Board at the very moment when their advice would have been of supreme value. Nevertheless, we hold that it is the duty of every medical man to support the policy agreed upon by the representative body of the British Medical Association, which, in spite of various shortcomings, must necessarily form the central fighting organisation of our profession. On such grounds it may be hoped that the example of Dr. H. Jones will be followed by further resignations of members still retaining a seat on the Advisory Committee. The last point to which attention may be called is the declaration of Mr. Masterman last month to the effect that if to raise another £4,000,000 for medical fees were the only alternative to the suspension of medical benefit, then without any doubt medical benefit would be suspended. The *Daily News*, whose hostility to the medical profession throughout the present controversy has been conspicuous, accepts that declaration as meaning that the approved societies would take the money and make their own terms. The prospect of such an event fills its editorial heart with joy, and it is pointed out that past experience has shown medical men cannot fight the societies in the open, while there is a constant supply of young doctors from England, Scotland, Ireland and Wales who want a regular income such as would be forthcoming from the clubs. The *Daily News* winds up with the familiar taunt that medical men should be wary of being exploited for political purposes, neglectful of the fact that the attempt to play fast and loose with the interests of the medical profession by the Government has led to the whole of the present struggle. In a situation beset with difficulties, success, it may be repeated, lies only through the gates of unity. Taking a hint from the enemy, we venture to appeal most solemnly to the younger generation of medical men to stand loyally by the profession they have adopted, and not to sacrifice future collective interest for the sake of an immediate selfish advantage. Some such advice might well be circulated amongst junior members of the profession by the British Medical Association. Lastly, in view of the present critical state of affairs, it is incumbent upon every medical practitioner to decide forthwith whether or not it would be wise to join the public medical service which has now reached an advanced stage of organisation.

A RESIGNATION FROM THE BRITISH MEDICAL ASSOCIATION.

The public newspapers of Monday, September 2nd, comment on the resignation of Dr. Duncan Forbes, Medical Officer of Health for Brighton, from the membership of the British Medical Association. At the present juncture his action is of extreme importance to the medical profession, and his public explanation, as given in the lay press, demands our serious attention. It is reported in a London journal that Dr Forbes declined to carry out the association pledge, when called upon by the local branch, by refusing to discharge official duties in connection with the Insurance Act. To use his own words:—"Up to a few days ago," he writes, "I thought that was all that was expected from public officials. I thought that it was recognised that the first duty of a public official was to advise and assist public bodies in the manner he judged most likely to promote the efficiency of their administration. I now gather from the Brighton Division that the public official who remains a member of the B.M.A. must follow any policy laid down by that body, and must not assist his council in carrying out any alternative policy in conflict therewith." Dr. Forbes then alludes to the advertisement for whole time medical men for medical inspection and treatment, published by the Education Committee at his suggestion, in opposition to the views of the local profession. Reverting to the Insurance Act Dr. Forbes asserts, "the Brighton Division wished me to refuse to do work which is included in the comprehensive list of my duties, in order that the Council might be embarrassed in carrying out their legal obligations. It now transpires that the Brighton Town Council has appointed Dr. Forbes chief tuberculosis officer for the borough for the purposes of the Insurance Act. At present it is somewhat difficult to grasp the situation thus created. The resolution of the representatives, meeting at Liverpool expressly sanctioned the holding of sanatorium posts by members. That surely covers Dr. Forbes so far as the sanatorium benefits of the Act are concerned, but possibly the disapproval of those of this division of his action in the matter of the school medical officers was the chief determining factor. In any case the breaking of a deliberate pledge is and always must be a serious matter. No man can serve two masters satisfactorily, and it is only natural that when a choice between them becomes obligatory a direct employer should come before a voluntarily adopted organisation. The situation is not palliated by the fact that a paid official post enters into the proceedings. Obviously it is a most undesirable state of affairs that a medical officer of health should not be on harmonious terms with the medical men in his district, nor can it apparently be to the interests of a large and populous town like Brighton that its chief health official should be burdened with additional special duties. The burden of work for a conscientious medical officer of health is heavy and increasing, and is usually more than enough for the energies of one man. The Local Government Board, however, appear to have sanctioned the appointment in question. From various points of view we are reluctantly forced to regard the resignation of Dr. Forbes as ominous of further dissensions in the medical profession with regard to the administration of the Insurance Act.

CURRENT TOPICS.

Tuberculous Cows.

The *Westminster Gazette* has been publishing a series of able articles on the milk question. In one of the latest of these the problem of destruction of tuberculous cows is discussed, and the great difficulties in the way, especially on the score of expense, are set forth. In the first place, it would be necessary to set up an efficient system of inspection. It is clearly shown that this could not be carried out without a staff of at least 70 to 80 inspectors, whose time would be fully taken up with their duties. Assuming that no superior staff was called for, and that the inspectors could be got for a salary of £500, the outlay in this direction alone would approach £400,000 a year. The estimates of all authorities who have investigated the subject give an average approximately of 40 per cent. of tuberculous dairy animals among the herds in this country—a total of some 1,120,000 animals. To slaughter the whole of these animals and to compensate the farmer at the lowest possible rate would mean the expenditure of a vast sum. The "wasters" and the cows with tuberculous udders call most urgently for extermination. The number of these is reckoned at about 4 per cent. of the animals in the country, and the cost of their destruction is estimated at more than £500,000. It is urged that the farmer should be encouraged in every way to get rid of these infectious animals, and that with systematic slaughtering there should be increased stringency in the matter of housing. In Holland a farmer who receives compensation obtains the money on condition of giving guarantees as to keeping his cattle in sanitary conditions in future, and as to avoiding the introduction of animals likely to be infected'. These *Westminster Gazette* articles deserve publication in permanent form. They are of much more than passing interest.

Women's Sick and Wounded Convoy Corps.

The existence of this corps forms one of the numerous similar signs of the times, all pointing in the same direction. Women are now taking part in all kinds of movements in which the first essential qualification is a standard of physical fitness that would not have been thought attainable by the sex a few generations ago; and these activities nowadays are taken as a matter of course, not in any way calling for public criticism. During the past week the corps has been undergoing its third year's training in camp at Rottingdean. The object is so to train the members, that they may be competent to do all that may be required for the sick and wounded in war during the days of transit from the field hospital to the base. The training comprises a three years' course in the following subjects:—First aid, physiology, hygiene, sanitation, field nursing, and practical work in hospitals; cooking; laundry and housewifery; signalling; ambulance work; improvisation of bandages, splints, stretchers, etc.; adaptation of buildings for hospital purposes, and of carts and railway trucks into vehicles suitable for transportation of the wounded; and riding and the care and management of horses. The corps leads a military disciplined life in camp, the drills, exercises, and instruction, including swimming and life-saving and treatment of the apparently drowned, filling the day. The night guards are mounted by the women, and at least once during the training the whole corps is turned out by a night fire alarm.

Rural Housing and Building By-Laws.

The health and the ethical improvement of the people depend largely upon the housing problem, and this again depends upon the possibility of providing dwellings which can be let at rentals affording reasonable interest for the capital invested. The difficulties in doing this have up to now been increased by the stringency of by-laws which enforce the use of both expensive materials and methods of building. The Local Government Board has therefore now wisely issued a circular which, by allowing greater freedom to authorities, will, if acted upon, facilitate the erection of small dwelling-houses throughout the country. The circular points out that by-laws are intended to act in the interests of the inhabitants and to prescribe standards of building securing stability, protection from fire, and healthy conditions, and it is undesirable that by-laws should afford ground for the suggestion that they are unnecessarily restrictive. New methods of construction demand periodical revision of by-laws. For example, the earlier forms of by-laws, framed with particular reference to brick construction, imposed conditions as to wall thickness, and the use of materials which are inappropriate to types of construction now in use, such as building with hollow block, or slabs of terra cotta, concrete, and the like material, reinforced brickwork, or reinforced concrete. Many of the older by-laws do not provide for hollow and half-timbered walls and steel or other framed walls hung with tiles, slates, etc., filled in where necessary with incombustible materials. Isolated cottages in every way satisfactory can often be cheaply built mainly of timber; and the method of constructing cheap houses of concrete —"poured" or "moulded" houses—as suggested by Edison, and extensively used in the United States, might well be introduced into this country.

House Drains and Sewer Air.

Within the last few days has been published the report on house drains by the Departmental Committee, the appointment of which by Mr. John Burns was notified in these columns some time ago. The most interesting item for the medical reader in the report is perhaps the statement of the difference of opinion that prevails as to the effects of sewer air upon health. The report points out that formerly outbreaks of many diseases were unhesitatingly ascribed to defective drains and sewers, and that now although sewer air is not generally regarded in such a dangerous light, a considerable body of medical opinion retains the view that certain diseases, notably typhoid fever, diphtheria, quinsy and sore throat, and certain "septic" diseases, are fostered or produced by sewer air or drain air. On the other hand, many authorities believe that if past outbreaks of disease attributed directly to sewer air could be reinvestigated in the light of present knowledge some other explanation of the facts ascertained would be patent, and that emanations from drains and sewers, although harmful in the same way that any offensive air may be, are not the cause of and do not foster the spread of any disease. The problems involved seem to be in a great part clearly bacteriological; they do not on the face of them appear extremely difficult, and in view of the number of able workers in this field, their solution should not now be long delayed.

A Medical School for Diseases of the Chest.

The rapid growth of specialism in medicine appears to be gradually modifying the conditions of medical teaching in this country. Little by little new centres for clinical instruction are springing up where those who wish to obtain extra qualifications in certain subjects can obtain the necessary experience. One of the latest additions to these post-graduate institutions is that recently established in connection with the Royal Hospital for Diseases of the Chest, City Road, which, we understand, will be open about the middle of next month. The working of the sanatorium benefit under the National Insurance Act, as well as the increased activity in regard to the treatment of tuberculosis in general, has created a demand for the "tuberculosis physician," who, whether he be a general practitioner or a consultant, is now expected by the public to possess more than the average amount of knowledge of this particular disease. According to the statement published by Dr. Barty King, the acting dean of the new Medical School for Diseases of the Chest, it is intended that instruction shall be given in the diagnosis and treatment of pulmonary tuberculosis, and it is hoped that the school will become a training centre for those who wish to qualify themselves for dispensary and sanatorium appointments. Clinical teaching and practice will be carried out in the wards, out-patient department, and tuberculosis dispensary. Instruction will also be given in bacteriological, X-ray, tuberculin, and sanatorium (adults and children) methods. Special opportunities will be granted for research work to those who possess the requisite qualifications. This is a movement of such importance that the co-operation of other chest and consumption hospitals might well be secured in order to provide one central training school. Only in this way can the dissipation of energy be prevented.

The Marching Powers of Troops.

According to military authorities the increased mobility of armies, which is a noticeable feature of present-day tactics, has led to no diminution in the amount of marching required of soldiers, but rather an increase. From the physical standpoint the different factors influencing the marching powers of troops have always been a subject of great interest to army medical officers. In the course of a thoughtful and practical paper read before the Section of Navy, Army, and Ambulance at the Liverpool meeting of the British Medical Association, Captain N. Dunbar Walker, R.A.M.C., stated that the load carried by the soldier on the march should be little more than 47 lbs., or one-third of the 10 st. man's body-weight, the official 59 lbs. odd, including clothing, being somewhat too much for many of the men. More instruction appears to be needed in marching while carrying full loads, including ammunition. The maintenance of a regular pace and the cultivation of the regimental *esprit de corps* are considered to be important accessory factors. It may be noted also that the stimulating properties of music, which have been physiologically attested, are mentioned as being most helpful in keeping up the spirits of the men. The tendency to move troops at night is to be deprecated, since the loss of sleep is bound to tell unfavourably upon the physique. To compensate for the loss of water from evaporation during an ordinary march of fourteen miles in a temperate climate the one and three-quarter pints contained in the regulation water-bottle should be sufficient.

The Health of School Teachers.

So much is now being done to improve the health of school-children that the physical condition of the teachers themselves is deemed quite a secondary consideration. Indeed, it is safe to say that in many quarters the health of those who are entrusted with the education of children is never given a thought. It is true that a medical examination is insisted upon by a few authorities, but beyond this little, if any, attention is paid to the health of teachers. The work of teaching makes a considerable demand upon the nervous force of both men and women, many of whom show distinct evidences of neurasthenia at the end of a hard term. Apart from maladies of the nervous system, functional or organic, to which teachers as a profession are liable, there are the effects of taking too little physical exercise and recreation to be considered. The teacher's work, even in day-schools, does not end when the pupils are dismissed, for there are other duties to perform out of school hours. It is difficult for a teacher to obtain that amount of physical and mental relaxation necessary to keep him or her in a fit condition, hence the inevitable staleness of mind and flabbiness of muscle that is apt to result from a too close application of evening study. A course of lectures on "Hygiene *of* the Teacher" might well be included in the teacher's curriculum, for the health of those who teach must not be overlooked in the efforts to improve the physical condition of the taught.

Beri-Beri and the Yage Plant.

The deprivation of the phosphatic contents of white rice in the process of milling or polishing has been held by many competent observers to be one of the causes of beri-beri. According to Dr. Funk, of the Lister Institute of Preventive Medicine, the active principle known as "vitamine," if given to a pigeon the victim of the disease, will restore the bird to a normal condition of health. It now appears that the yagé plant, found in that portion of the Republic of Colombia known as the Caquetá district, is accredited with curative properties, and, from a letter from Dr. R. Z. Bayon, recently published in the South American Supplement of the *Times*, its action in beri-beri is said to bave been most beneficial. Dr. Bayon, who has travelled for some months in the heart of the Caquetá district, states that decoctions of the plant not only cured two rubber hunters but also produced some peculiar telepathic effects upon those to whom it was administered. It is a matter for regret that botanical details respecting the plant are lacking, but it is understood that specimens will be investigated in this country with regard to its supposed curative properties in beri-beri. Whether the active principle of yagé will prove to be identical with "vitamine" may, perhaps, be revealed by chemical analysis.

PERSONAL.

Dr. Charles W. Hayward, barrister-at-law, of Liverpool, has been adopted as the prospective Liberal candidate for Radnorshire.

Surgeon-General L. E. Anderson, A.M.S., P.M.O., of the Bareilly Brigade, has been appointed Deputy-Director of Medical Services, 8th (Lucknow) Division.

Professor J. Lorrain Smith, M.A., M.D., F.R.S., of Manchester, has been appointed Professor of Pathology to the University of Edinburgh in succession to Professor Greenfield.

After twenty-four years' service, Dr. Joseph Wiglesworth has intimated his intention of retiring from his position of Medical Superintendent of the County Asylum at Rainhill.

Mr. F. Cook, B.Sc., M.B., B.S., has been awarded a Research Scholarship in Agricultural Science, in the department of animal nutrition, by the Board of Agriculture and Fisheries.

The Lord Mayor of London, Sir Thos. B. Crosby, M.D., F.R.C.S., will preside at the annual dinner of the old students of St. Thomas's Hospital to be held on Tuesday, October 1st, at 7.30 p.m.

Among the exhibits at the Royal Photographic Society's annual exhibition, at the Suffolk Street Galleries, are to be seen some interesting plastic X-ray photographs by Dr. Thurstan Holland, and some radiographs by Dr. J. Hall-Edwards.

As we go to press we have received, with profound regret, the news of the death of Mr. L. A. Bidwell, F.R.C.S., Surgeon to the West London Hospital, following upon an operation for appendicitis. A full obituary notice will appear in our next issue.

A CLINICAL LECTURE

ON

PERFORATION OF THE STOMACH AND DUODENUM, WITH SPECIAL REFERENCE TO THE EARLY SYMPTOMS. (a)

By G. GREY TURNER, F.R.C.S.,

Newcastle-upon-Tyne.

Ladies and Gentlemen.—I was very pleased to fall in with the suggestion of the Superintendent, and lecture on some point of surgical interest, because it is very important that those of us who have the opportunities of working in large hospitals should do what we can to bring the results before the general practitioners, who do not, perhaps enjoy the advantages that we do. This subject is a very practical and important one. Perforation of the stomach or duodenum is not only a terrible accident as a complication of gastric or duodenal ulcer, but cases of the kind furnish some of the most awful calamities which affect the community. As a mode of death it has been recognised for ages, but a complete understanding of its frequency and of its natural history has only come as a result of the invasion of the abdomen by the surgeon. Prior to 1892 when, on the suggestion made by Mickulicz, life was first saved by operation in a case of perforated gastric ulcer, this accident was almost universally fatal, and many notable personages lost their lives in this way. Nothing can better show the change which has come over the surgery of the acute abdomen than the number of lives which are now annually saved by timely interference. In 1900, I operated on eight consecutive cases without losing a patient. But in order to realise our responsibility in this matter, we must recognise that there are many cases which run a very rapid course towards a fatal termination, and that our measures must be prompt if they are to be successful. In 1904 I saw a young man, æt. 25, who had suffered from indigestion for two years. One evening he had sudden pain and collapse. A surgeon was telephoned for, but, not appreciating the full importance of the condition, he advised waiting until the morning. In the morning I saw the patient, and found him moribund, with lips blue, hands cold, an almost imperceptible pulse, and the abdomen tender and rigid all over. He died 27 hours after the perforation had occurred. Even the full significance of these symptoms is not always appreciated at the present day. On the 8th of this month a patient was admitted into the Newcastle Infirmary, a strong man, 40 years of age. He had had indigestion only three weeks. Twenty-four hours before his admission he was seized with severe pain. He was so ill and the pain was so intense that he was supposed to be the subject of acute poisoning, and was treated accordingly. On arrival at the hospital he was moribund, and died twenty-nine hours after perforation. An acute duodenal ulcer was found just beyond the pylorus. The frequency of perforation is difficult to estimate, and I think it is doubtful whether it is as much more common as is alleged, though certainly it is now much more frequently recognised. In 1889, no patient with this condition was admitted into Newcastle Infirmary, but ten years later there were 18 cases, with three deaths.

Is there an acute perforating ulcer? The average age of a series of patients operated upon for ruptured gastric ulcer and duodenal ulcer was found to be 28 years, while the average age of cases operated upon for chronic symptoms by gastro-enterostomy was 40 years. This may mean that cases which safely run the gauntlet without perforation are merely spared for surgical treatment later on. So we should expect to find a history of such length as to correspond to the difference in the average age, but that is not so. In 57 cases of operation on non-perforating duodenal ulcer, the ulcer was found to be on the inner wall in all. In some there was a second ulcer or scar on the outer wall. In operating on 51 cases of perforating gastric or duodenal ulcer, the conditions suggested chronicity in 27, whereas in 24 the ulcer was acute. These facts suggest that there is a special type of ulcer whose principal characteristic is a proclivitiy to perforate. This is important, as it has a great bearing on the diagnosis and on questions of treatment, and especially on whether or not gastro-enterostomy should be performed at the time of the operation. So we must recognise *perforation as an accident almost peculiar to one type of ulcer, and as an accidental complication of another type.* The incidence of the two varieties appears to differ in the stomach as compared with the duodenum, for in the stomach the proportion of perforations of chronic types of ulcer is greater than in the case of the duodenum. But the discrepancy is easily explained, because in the duodenum the chronic non-perforating ulcer is on the inner wall, and is protected by the intimate relations of the pancreas. And the same thing is illustrated in the stomach, for of gastric ulcers in general 32 per cent. are on the posterior wall, but of those that perforate only 17 per cent. are in that situation, because such ulcers early have adhesions to the pancreas.

Let us consider the features of the ulcers which perforate. The typical perforating acute ulcer is nearly always near the pylorus, on the anterior wall or in the first part of the duodenum. Various reasons have been given for this, but none appear to me to be very illuminating. Still, there must be some simple explanation. These ulcers of acute kind are rarely larger than a threepenny bit, and have a punched-out appearance, with edges which are clean-cut and not heaped up. They may be multiple, but multiple perforations are uncommon. When perforation occurs, it appears as if the whole bottom of the ulcer had sloughed away, leaving a hole almost as big as the original ulcer; sometimes it is merely a small slit perforation. What is known as the kissing ulcer is frequently found. You often find immediately opposite the chief ulcer another, and ulcers on the inner wall of the duodenum often bear this relation to those on the outer wall. From examination of many specimens I have concluded that the second or kissing ulcer is often of the acute variety. In the duodenum, chronic ulcer is probably always on the inner wall, and the kissing ulcer is just opposite, and is acute. This we have learned from experience, not only in the necropsy room, but also on the operating table, because there has been considerable attention given to pyloroplasty, and the parts have been carefully examined, and we find, commonly, ulcer on the outer wall of the duodenum is associated with ulcer on the inner wall. That is important because if, at the operation, the surgeon finds an acute ulcer on the outer wall of the duodenum which has perforated, he is tempted to say it is only necessary to suture it. But if there has been a long history there will probably be a second ulcer on the inner wall, and therefore, something further must be done than merely closure of the perforating ulcer. Chronic ulcers are about the lesser curvature, of the saddle variety, and, perhaps, are leading to commencing hour-glass stenosis of the stomach. In chronic ulcer there is always surrounding inflammation, and œdema, with thickening of the peritoneum and vessels leading to the site of the ulcers, and the area is friable, so that the sutures will scarcely hold. I have brought a specimen which shows chronic ulcer on one side, and an acute ulcer on the other side, and a small glass rod has been passed through the perforation. Of my 51 cases, there were only 2 on the posterior surface of the stomach.

(a) Delivered at the Polyclinic, Chenies Street, London, W.C., Tuesday, July 16th, 1912.

I will now refer to one or two anatomical points. The peritoneal cavity is only a potential cavity, and is normally occupied by the contained viscera, without dead spaces. But the peritoneal cavity is not an uncharted sea, and I direct your attention to this diagram. Fluid, following perforation, first runs into what we know as Morison's pouch, then down the outer side of the colon and outer side of the cæcum, and so into the pouch of Douglas. The importance of that is, that commonly patients complain, when they have this trouble, of pain about the cæcum, and sometimes there are the symptoms usually associated with appendicitis, and perhaps there may be trouble with micturition. In its passage the fluid may flow over the liver, and it is there you find sub-diaphragmatic abscess in cases which have perforated some time before. With regard to the physiology of the peritoneum, it is exceedingly sensitive, and that explains why a small leak is attended with some pain and evidences of shock. But there is another point of importance, and that refers to the question of the preparedness of the peritoneum. In the early days of ovariotomy, you may recollect that the cases which did badly and died were those in which the surgeon was perfectly simple, in which the surgeon simply tapped and removed the cyst, yet the patient died in 48 hours of acute peritonitis. But in the cases in which there were adhesions, and in which the cyst had to be torn out, the patients recovered. It means that in the one case the peritoneum was taken unawares, and in the other, where there were adhesions, it was prepared by previous infection. And the upper part of the peritoneum is much more sensitive than is the lower part, so that the symptoms when there is a collection of fluid in the pelvis are not so acute as when the collection is higher up. Both before and after operation this is of importance, because the patient should be encouraged to adopt the sitting posture, so that the fluid may be induced to go into the pelvis, where it will be less harmful. It is also important at the operation, because it shows that, no matter how much fluid there is in the upper part of the abdomen you must look in the pelvis for fluid also. I think it is proved beyond doubt that spontaneous recovery from ruptured gastric or duodenal ulcer can occur, At one time that was not thought possible. One easily understands how that can occur in the case of purely localised collections, but I have proof that it can take place in cases in which it was generalised. It is well to recognise that there are certain definite classes of perforations, or results of them. There is the *acute perforation with general extravasation,* when an ulcer suddenly ruptures into the healthy unprotected peritoneum, and the statistics I present to you in the tables all refer to that class of case. There is *sub-acute perforation with a limited degree of extravasation,* and there is *chronic perforation without extravasation,* the ulcer slowly eating its way into neighbouring organs.

With regard to the clinical aspects of the subject, at what age does perforation occur? Cases have been met with, in children's hospitals, in little babies, but they are very rare; but several have been operated upon at 12 and 13 years of age. My youngest case was that of a boy of 18, and my oldest was a man, æt. 70. My colleague, Mr. J. W. Heslop, operated upon a woman, æt. 72, for ruptured gastric ulcer. The average of my series works out at 30 years for gastric ulcers, and 33½ years for duodenals. Then there is the question of sex. It is curious that in my series, and in most other similar series, most of the gastric cases were in females, while among the 34 cases of duodenal ulcer there was only one female.

An interesting question is: Can we tell when perforation is about to occur? I believe that is not possible. Some cases develop indigestion just before, or have an increase of previous troubles, but indigestion may certainly disappear. If the patient has an increase in digestive troubles which suddenly disappear, that is of the gravest significance, because it means gangrene of the base of the ulcer. Other patients may be unaware that they have so dangerous a disease; indeed, they may have been exceptionally well just before the onset of the perforation. I have known the accident take place while the patient was actually lying in a ward undergoing medical treatment. I have seen a big, strong labourer who was so suddenly struck down at his work that it was regarded as a case of sunstroke. On a Saturday a man consulted me on account of stomach trouble which he had had for ten years, and which had lately become worse. I strongly advised that he should have the operation of gastro-enterostomy done, and made arrangements for the patient to enter a private hospital on the Monday. But on that day he perforated, and had to be at once taken to the nearest infirmary. One patient recently operated upon had called upon a doctor for a bottle of medicine for stomach trouble, and on her way home she had perforation. As soon as the diagnosis of ulcer has been made the patient should be placed under the treatment decided upon, and warned of the possibility of the occurrence of perforation. It may occur at night, but it usually happens in the daytime. That is of some importance in considering the differential diagnosis, because it is common for appendicitis to start in the early hours of the morning, awakening the patient from sleep. I want to put before you some statistics, showing how very important is early recognition and treatment.

PERFORATED GASTRIC AND DUODENAL ULCER.—PERSONAL CASES.

Gastric Cases.

17 cases with 3 deaths = 17.6 per cent.

Average number of hours between perforation and operation = 10½.

Longest interval between perforation and operation = 28 hours with recovery.

Shortest interval between perforation and operation = 5 hours with recovery.

In the cases that died, 9½, 10½, and 20 hours elapsed before operation.

In 5 cases gastrostomy was performed—2 died.

In 1 case gastrostomy with gastro-enterostomy—recovered.

In 2 cases gastro-enterostomy—recovered.

In 2 cases pyloroplasty—recovered.

Duodenal Cases.

34 cases with 5 deaths = 14.7 per cent.

Average number of hours between perforation and operation = 12½.

Longest interval between perforation and operation = 36 hours with recovery.

Shortest interval between perforation and operation = 3 hours with recovery.

In the cases that died, 9½, 16, 24, 28, and 28 hours elapsed before operation.

In 1 case gastrostomy with gastro-enterostomy was performed—recovery.

In 1 case gastrostomy with pyloroplasty—recovery.

In 11 cases gastroenterostomy—2 deaths.

In 1 case pyloroplasty—recovery.

Total.—51 cases with 8 deaths (15.6 per cent.).

Of the 36 cases operated upon within 12 hours only 3 died.

What can we do to improve these results? These figures represent only the cases of acute perforation in which it was possible to carry out complete operation. To get the true mortality of the accident of perforation it is necessary to add the subacute cases, those which were too ill for anything more than mere drainage, and those which were too ill to admit of any operation. That brings me to a series of 60 cases with 16 deaths, or 26 per cent. mortality, which shows how great is our responsibility. We must get the cases to the surgeon as soon as possible, as the time which elapses between perforation and operation seems to be the most important factor in ensuring success.

How does a previous history of indigestion help us? I have told you that many cases occur in which there is no history of indigestion; but when there is such a history it is a great help in diagnosis. A negative history on that point is of no value. If every case were allowed to run its natural course without interference, we should find that there was pain, shock, a period of reaction, followed by peritonitis, toxæmia, and death. In most cases the onset is sudden and severe; it may be even overwhelming, so that the patient falls down in the street. Some of the patients feel as if they had been kicked, or struck by lightning; sometimes they writhe in agony, and roll on the floor. *The shock may be only transient, but in most of these cases there is definite evidence of shock;* they may be so faint as to alarm their friends, or the medical attendant. *The testimony of friends as to the occurrence of this stage of collapse is most important.* People have been known to die in this condition of collapse. In a smaller proportion of cases the onset is less severe, and in some it is even gradual. One patient, aet. 34, said that for 24 years he had had definite stomach trouble, with pain two hours after taking food, and relieved by taking more food. But he never vomited, and the bowels wre regular. During this period he had been taking medicine, which he obtained from a chemist; he had never consulted his doctor for the condition. Two weeks ago the present attack of indigestion began. On the day on which perforation took place he had dinner at twelve o'clock, and began to suffer pain at four o'clock. At five he took tea, and was at once relieved. At seven, when on his way home, the old pain returned, and got gradually worse, so that he had to walk doubled up. At 7.30 Dr. J. J. Campbell found the patient rolling in bed in an agony of pain, sweating, and looking collapsed. His abdomen was uniformly rigid. Dr. Campbell gave a ¼gr. morphia, and telephoned for me, as he diagnosed that perforation had occurred. When I saw the patient he looked well, without anything to suggest serious abdominal trouble. He not only said the pain had disappeared, but volunteered the statement that it commenced to disappear before he had the morphia. His pulse rate was 66, and it was full. There was some rigidity in the upper segment of the right rectus, with slight tenderness, but no tenderness elsewhere. In consequence of his condition, and his statement that the improvement set in before he had the morphia, I gave my opinion that there was no perforation. But at 10.15 p.m. the pain began again, gradually, as before, and a hot poultice was applied, but at 10.45 he was sitting up in bed complaining of great pain, and his abdomen was rigid all over. He had ten grains of phenacetin and 20 drops of liq. morph., but without relief. Later on, his doctor saw him and found him looking worse. The patient was removed to the Newcastle Infirmary, and at 4.15 a.m. I saw him, when the change in his appearance was very marked. The whole of his face was grey and drawn, and his lips blue and dry. He complained of pain, and his pulse was 76. We found a ruptured duodenal ulcer, which we sutured, the man recovering. *After a period of pain and shock, there is always reaction,* and this fact I wish to emphasise. The early shock may pass off in half an hour, or it may last two or four hours. I am, of course, not referring to the improvement which comes on after the patient has had morphia. The reaction I speak of may be most striking, so that the anxiety of the friends is much relieved; and it may mislead the medical attendant. To illustrate this phase, I may quote the case of a man, æt. 37, a bank manager, who gave a history of duodenal ulcer extending over some years. He was in his garden one evening, and later went to see some friends, with whom he had supper. Immediately after the meal he was seized with most severe pain in the abdomen, which caused him to roll on the floor, and he looked as if he would die. His friends thought he must have taken poison by mistake. The abdomen was rubbed by his friends, and this gave him some ease; but the parts soon became so tender that he could not allow them to be touched. He was so bad that he could speak only in a whisper. When his doctor saw him he was cold and collapsed and was looking blanched and ill, his abdomen being very rigid. I arrived early next morning, and found the patient so much better that he said if we would leave him alone he was sure he would be able to go back to his work. He looked a good colour, like a man who has been used to life in the country. But his abdomen was rigid and tender. I found that he had a ruptured duodenal ulcer, with general extravasation. Fortunately he recovered. Other cases in the period of reaction could be quoted, such as that of a patient who was admitted to the hospital, and so far recovered from the shock which attended the onset that I was deceived, and allowed the patient to lie for two hours before I was able to make up my mind. But the persistence of tenderness and rigidity enabled me to come to a decision. In another case, seven hours after perforation the girl was so much better that it was difficult to persuade the mother that an operation was necessary. We must not be misled by what the patient is able to do in this period of reaction. These patients are sometimes able to walk a long distance from work to their lodgings before being seen by a medical man. From this stage of collapse the progress may be slow towards the establishment of peritonitis. *It is, therefore, important that you should attach grave significance to the history of the initial attack.* But the real "lethal interval" is that induced by the administration of morphia. I must quote you the case of a man, aet. 61, who said that during the whole of his life he had had stomach trouble, taking the form of pain after food, coming on two hours after a meal. The pain was worse at night. Taking sodium bicarbonate, or lying down quietly gave him relief. At times he had twelve months of freedom from the pain. Five years ago he consulted his doctor, and had several bottles of medicine, but he has not been continuously under the care of any medical man. On Thursday morning, at 11.30, he was stooping down when he was suddenly seized with a severe pain in the upper part of the abdomen. He managed to get into the house in a doubled-up posture, and his wife noticed that he looked white and very ill. He was sweating very profusely. He was assisted to bed and a doctor sent for. At 12.30 the pain was a little better, and he had a ¼ grain morphia with atropine. Two hours later the doctor saw the patient again, and, feeling sure that perforation had occurred, sent for me. I arranged to go out by the first available train, but as I was about to leave a telegram was handed to me saying it was not now necessary for me to come. That message was prompted by the apparent great improvement in the patient. He looked well, his pulse was 80, and there was no elevation of temperature, while his pain was considerably less. At 7.30 next morning the doctor was sent for again, and was told that the patient had had a bad night, and had frequently complained of pain. At 6.30 the pain was much worse, and when the doctor saw him at 7.30 he was obviously very ill; the pulse was alarmingly rapid and weak. I went out by the next train, and saw the patient twenty-four hours after the perforation. I found a big man lying in bed, on his left side, moaning with pain, his face grey, lips blue, and a pulse of 142, and almost imperceptible. His tongue was dirty, but not dry. His abdomen was rigid, but not distended. Nothing could then be done for him, and he died a few hours after I saw him.

With regard to physical signs, *rigidity is of the greatest possible importance,* and it is scarcely ever absent in these cases. It is characteristic for these patients to come in with their abdomen very hard; indeed, our house-surgeons have come to practically diagnose the cases on this one point, combined, of course, with the typical history. It is difficult for the patient to take a deep breath, and there is tenderness all over the abdomen, though it may be more marked in the epigastrium, and even in the iliac fossa. I attach no importance to the absence of liver dulness, unless the liver area is tympanitic. Lesser degrees are not of value. Dulness in the flanks is a late sign. Observation of these cases enables one to detect a gradual increase of pulse rate, and that, with the onset and the presence of rigidity is enough for the diagnosis.

Time does not permit me to enter into details about the operation, but in the majority of cases it is simple enough. Having found and sutured the ulcer, I think it is very important to irrigate the peritoneum, and not be content with mere mopping. Give attention to Douglas' pouch, because only four hours afterwards that has been found full of fluid. It is usually unnecessary to drain the peritoneal cavity, and that leads one to ask what we can do with the desperate cases, those which have gone on so long that it is not reasonable to expect a good result from operation.

With regard to the question of temporary gastrostomy, that was brought forward, as far as I am concerned, by Mr. W. G. Richardson, one of our surgeons. I think it is most valuable. When it is necessary it is in those cases which are not seen by the surgeon for more than twelve hours after perforation, in which peritonitis has already developed, and especially has reached the upper part of the abdomen, because it is in those cases that there may be acute dilatation of the stomach, from which the patient may die. If there has been gastrostomy, one can at once say whether there is gas in the stomach. The gas is let out, and the stomach can be washed out through the tube, giving very great relief. For cases in this late stage this has helped to diminish mortality.

We have still to discuss the question of the use of gastro-enterostomy for perforating ulcer. I will simply give you the conclusions. The question is, does the act of perforation cure the gastric or duodenal ulcer? I found that 38 per cent. of patients were not cured by the simple act of perforation, and those were the cases which gave a long antecedent history of indigestion. This is what one would expect. Therefore, I have made it a rule that where there is that long history, to—if the patient is able to stand it—do gastro-enterostomy or pyloroplasty. I went over the notes of my hospital cases and tried to determine from the histories in which it seemed that gastro-enterostomy should have been performed, and it worked out about the same—from 35 to 38 per cent., and this was further confirmed by an investigation into the after-histories. There are some circumstances in which pyloroplasty will be a simpler operation and will fufill the same conditions as gastro-enterostomy. Those are the cases with an ulcer just at either side of the pylorus. That point, however, is a contentious one, and I have dealt with it in a recent number of "Surgery, Gynæcology, and Obstetrics."—June, 1912.

In conclusion, I desire to pay a tribute to the practitioners in the district in which I work, because it is through their help that the mortality through this calamity has become lower. I said, years ago, that the onus of making an early diagnosis rests with the practitioner, and therefore the credit belongs to him when the cases are carried to a successful issue.

ORIGINAL PAPERS.

TRACHEO-BRONCHIAL ADENOPATHY.

By PIERRE MAUREL, M.D.,

Late Interne in the Paris Hospitals, Consulting Physician at La Bourboule.

[Specially Reported for this Journal.]

We see a great many cases of tracheo-bronchial adenopathy at La Bourboule, and it may be interesting to run over the principal features of these cases and to follow them in their course in view of treatment and prognosis. The main symptoms are, of course, familiar to all: Signs of pressure on the superficial and deep veins, a pertussis-like cough, laryngeal troubles, dulness over the anterior and posterior glandular area, diminution of the vesicular murmur, interscapular vertebral bronchial souffle, and the characteristic radioscopic appearances.

Once the diagnosis of tracheo-bronchial adenopathy is established, it remains to be settled whether the glandular affection is or is not tuberculous. Without at once employing the cuti-reaction we may look for the constitutional symptoms, which, as a rule, suffice to establish the diagnosis.

In tuberculous cases the patient is usually pale, thin, delicate, with a narrow chest. The features are drawn; the skin is dull, dry, rough; the veins are prominent, and the pilary system well developed. In the axilla, neck, and groin we find little glands that roll under the finger. This constitutes micropolyadenia, which, in the young, is an important sign of the onset of tuberculosis. The evening temperature may be raised, and when this is the case in association with loss of flesh and anæmia we are justified in suspecting tuberculosis. One sign pointing to the tuberculous nature of the glandular enlargement is the persistence of the symptoms. Whenever the enlargement tends to become persistent suspicion should be excited. But the adenopathy is not necessarily tuberculous. This glandular enlargement may supervene after bronchopneumonia following measles, or after whooping cough, as well as after affections of the nasopharyngeal mucosa, the tonsils, the trachea or the bronchi. It is met with in influenza, typhoid fever, glandular fever, mumps, erysipelas and impetigo.

The physical signs are the same as in tuberculous adenopathy, but they are less marked and less durable; indeed, this diminished persistence is a sign of good augury.

The symptoms of inflammatory tracheo-bronchial adenopathy run a rapid course and soon subside. In mild cases of simple acute adenopathy the swelling subsides along with the cause. In other cases there is a remission, but this may be merely a stage of latent tuberculosis. After disappearing the signs may recur, and this ought at once to make us think of tuberculosis. If prolonged, the latent period may be regarded as tantamount to recovery, but bacillary foci may remain embedded in the glandular parenchyma. Acute meningitis and pulmonary tuberculosis may supervene years after apparent recovery. These long periods of quiescence do not prove the non-tuberculous nature of the adenopathy; on the contrary, they may be evidence in favour thereof.

Lastly, the symptoms, instead of disappearing, may persist. In this case, apart from the local mediastinal or pulmonary symptoms, the tendency is to acute generalised tuberculosis, chronic pulmonary tuberculosis, or cachexia. The last-named is common enough in very young children, and resembles the cachexia of gastro-intestinal affections of infancy minus the digestive disturbance. The patients may succumb to the pressure effects on the mediastinal organs or to pulmonary complications.

Should the tracheo-bronchial adenopathy be neither tuberculous nor simple, it may possibly be syphilitic, but this is much less frequent. It is met with in the secondary and tertiary periods, or it may be a symptom of inherited syphilis. The patient's history, the concomitant signs, and the existence of specific stigmata should put us on the track. The rapid and favourable effects of specific treatment will serve as the touchstone of diagnosis.

Lastly, if the adenopathy is not simple or tuberculous or syphilitic, we must consider the possibility of its being due to leukæmia, and, with this in mind, examine the blood, spleen, and other glands.

We need only mention such a thing as lymphosarcoma with its sharp pain, its rapid course, and its œdema.

In arriving at a diagnosis of tracheo-bronchial adenopathy we must also take into account such accessory factors as age, the ætiological conditions in which the affection occurred, the general health, the patient's antecedents, and the presence of manifestations in the bones, joints, skin, glands, etc. Even in apparently innocent cases we must never lose sight of the possibility—indeed, the probability—of the enlargement being tuberculous. My own experience almost leads me to agree with Baboneix that clinically tracheo-bronchial adenopathy is always tuberculous.

There is a supreme test in doubtful cases—*viz.*, the cuti-reaction.

The prognosis depends upon the nature of the glandular affection. As in most instances this is tuberculous, the outlook is necessarily grave; but, though graver, it is not necessarily fatal. This is a curable, not very virulent, form of tuberculosis, but treatment is all important, the more so because we must always apprehend a recrudescence in spite of the appearance of recovery, which may be incomplete. It may only be a period of quiescence with the ever-present risk of generalisation. The disease does sometimes remain for a long time quite silent, and this is not compatible with health and longevity, but there is all the time a focus of bacilli which, under certain influences, may burst into flame in a form of meningitis, galloping consumption, or what not.

There is reason to believe that the most extensive adenopathies are not the most threatening, nevertheless we must look upon them with suspicion when they evince no tendency to improve, and are causing troublesome pressure symptoms in the mediastinum. Little glandular enlargements which rapidly undergo absorption appear to justify a good forecast. These are often merely congested glands, which may be absorbed or become sclerosed. The prognosis also depends upon the state of the lungs and upon the early institution of treatment. It is essential to recognise and treat the condition early. At a very early period, as Grancher points out, the condition is eminently curable—the most curable, indeed, of all chronic diseases. This is the time to send these patients to watering places where special attention is paid to the treatment of these glandular troubles, and to institute the treatment now to be discussed.

The treatment is that usually employed in presence of tuberculous lesions: the administration of arsenic in one form or another over long periods of time with periodical intervals of repose, the iodide of iron, iodotannic syrup, cod liver oil, glycerophosphate of lime, etc.

Counter-irritation to the chest—as, for instance, the repeated application of tincture of iodine, turpentine or ammonia liniments, and hydrotherapy. These patients should live in the country, for the open air is specially indicated in the torpid forms, and prolonged seaside residence. There we can apply Grancher's formula—*viz.*, a double ration of fresh air and food and half a ration of work. Sunbaths are not without value.

The food should be abundant, but must not contain too large a proportion of nitrogenous articles—indeed, it should consist mainly of farinaceous articles.

The principal point to consider is the prophylactic treatment. After whooping-cough and measles we must give the pulmonary condition our careful attention in order to obviate, as far as possible, the risk of tuberculous contamination. Then, too, we must hasten to restore the organism to a state of normal resistence as a further safeguard against bacillary infection. On the other hand, we must take all necessary precautions to avoid contamination *via* the food—as, for instance, the ingestion of the milk of tuberculous cows. I have seen very remarkable results attend a course of treatment at La Bourboule, and similar results are obtained at Challes, Eaux Bonnes, Mont Dore, etc.

CRITICAL PERIODS IN INFANT LIFE.

By J. HUGH HEANEY, M.D., B.Ch.

THE two critical periods in the nutritive life of an infant are, (1) at *birth*, in case the mother's milk does not become available, and (2) at any time that the maternal supply fails and artificial feeding becomes necessary.

The chief symptoms of indigestion at either of these periods are: wasting, constipation, or constipation alternating with diarrhœa, and vomiting. It is of the utmost importance to treat the vomiting. With its cessation the other evil symptoms quickly ameliorate. To this end, many mixtures of varying proportions of milk and water, children's foods, condensed milk, etc., had in times past to be patiently tried.

The advent of sodium citrate was certainly a boon, and in many cases it acted wonderfully well. It is, however, said to have certain serious effects on the general health when used persistently. A good deal of practical difficulty has been found in regard to the dispensing of the small powders of sodium citrate, so that it has been necessary to have recourse to keeping the salt in solution.

During the past six months I have seen many cases belonging to the two classes referred to above. Among them were two premature infants (7-8 months) who belonged to the first class, and had received no mother's milk at all. Of the second class, one was very obstinate indeed. The baby was five months old when the mother's milk quite disappeared. The child had been ailing for some weeks, and no doubt was suffering from the use of a milk deficient in quantity and quality. The gastric irritation was intense.

The efficacy of cow's milk properly diluted and with sufficient milk albumen added to equal the percentage of that in human milk had been brought to my notice. I tried it in these cases (using Nestlè's milk instead of cow's in the premature cases) in the form of Albulactin, which claims to be pure milk albumen in the form of a sterile, soluble powder. Good results were immediate, both in the case of the newly born babies, and in the older ones in whom the maternal supply had failed. But in the one case just referred to, where the baby had been at the breast for some months, the vomiting was very persistent, but eventually yielded to the milk albumen dissolved in water alone.

The *rationale* is said to be that when the albumen content of cow's milk is increased to equal that of human milk, we get during gastric digestion the fine flaky curd of human milk, instead of the hard, firm, bulky curd of cow's milk I believe there are chemical reasons given for that, but, at any rate, the difference is obvious to the naked eye.

The period of dentition is again critical. Convulsions are frequent, and although it is sometimes denied, there would seem to be a special tendency to bronchial ailments and various types of skin eruptions.

Careful attention to the feeding, to the hygiene of the mouth, and the judicious administration of bromides in sufficient doses to procure plenty of rest, will meet with much success. In severe cases it may even be necessary to administer small doses of chloral in order to secure adequate sleep. However serious the condition of a child may appear to be during dentition, under judicious treatment it will thrive perfectly satisfactorily.

There is another and most important critical time in infant life, which does not arise from within: I refer to the risk run in July, August and September of each year of contracting Infective Diarrhœa.

The question of prevention is most important, and in view of certain dangers arising from the use of cow's milk as at present supplied, I intend to prescribe a good brand of condensed milk with the addition of milk albumen. Condensed milk, although not absolutely sterile, seems to be less risky than cow's milk for the use of the general public (used only for the danger period). The lumpy curd of unmodified cow's or condensed milk would seem to be a suitable nesting place for bacteria. The addition of milk albumen obviates this. Hence, for the masses, the easily prepared and simple prescription: condensed milk and a good form of milk albumen.

With regard to the treatment of the diarrhœa; I have nothing to add to what has been already well written on the subject, except that for egg albumen, milk albumen, dissolved in water might with advantage be substituted.

It is more nutritious, more easily prepared, and the water used may be either hot or cold.

DARWINISM AND MEDICINE. (*a*)

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In these days of vaccines and serums, when, if I may be allowed to say so, the bacteriologist is rampant and aggressive, there is a danger lest his brilliant successes should monopolise too much of our attention. Other aspects of disease are apt to suffer from undeserved neglect. The evolution theory, for example, has most valuable practical lessons to offer to the medical practitioner. Darwinism and bacteriology may be regarded as the two greatest gifts of nineteenth century science to medicine. They grew up side by side; but while to-day the bacteriologist holds the field, the practical bearings of the evolution theory on medical work are to a great extent neglected or forgotten.

At the present time it may be taken for granted, I think, that the evolution theory has in its broad features been generally accepted by scientific men. The bitter animosity and opposition that greeted Darwin's revolutionary doctrines fifty years ago have died down. In this twentieth century we willingly admit that the useless hairs scattered over our arms and legs are the remnants of the abundant coat of hair that kept our anthropoid ancestors warm. We may further admit, without a blush, that the habit of swinging the arms when walking is just an unconscious reminder of the long distant day when our ancestors were quadrupeds, and all four limbs of necessity kept time together.

PRACTICAL AIM OF THIS PAPER.

The purpose of this paper is practical rather than speculative—namely, to consider what help the evolution theory offers us in our work as practitioners, what assistance it has to give in our efforts to cure or prevent disease. Obviously, the subject is a large one; time will only permit us to glance at a few of the suggestions arising from this interesting line of thought.

In the first place, let us single out some of the principles of Darwinism that specially concern our own species, and the problems of disease; and in the second place let us consider some practical applications.

The fundamental idea of Darwinism, as applied to man, is, of course, that the human species is descended from a long line of animal ancestors; the prehistoric savage was preceded by the ape, and the ape in turn was descended from a quadruped, and so on.

The successive stages of growth which each individual passes through, from the ovum to the mature adult, are a recapitulation in brief, an epitome, of the successive stages of the evolution of the species. Thus the human embryo in its earlier stages is very like that of other mammalian animals, and presents a perfectly definite tail.

ADAPTATION TO SPECIAL ENVIRONMENT.

Of more immediate interest for our purpose is the doctrine that the anatomy and physiology of each species is most minutely adapted to its environment and habits. This close adaptation is the outcome of the keen struggle for existence through an enormous number of succeeding generations. It follows, then, that attempts to make radical changes in the habits or environment of any highly developed species are apt to be disastrous. For every species, a long

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(*a*) Paper read before the South African Medical Congress, at Johannesburg, April, 1912.

heredity has adjusted its organs so exactly to certain conditions, that the limits of change which nature will permit without mishap are very narrow indeed. Civilised man is continually experimenting in this direction. As our civilisation progresses, we are, perhaps all unwittingly, making ever more daring and reckless experiments in altering our environment and habits.

It would certainly seem that, during this last wonderful century of progress, our ambition has overleaped itself. Steam and electricity have revolutionised human conditions, and the prevalent physical deterioration compels us to admit that civilised man has been forcing the rate of change in his environment and mode of life beyond the limits of safety. We have deviated too much, or too rapidly, from the ways of our ancestors. Our children, and perhaps still more our grand-children, will have to pay the penalty.

Weismann's Theory.

Another modern evolutionary doctrine of great moment for us, is the hon-heredity of acquired characters; that is to say, that any modification acquired by an individual during his lifetime, as the result of environment, is *not* transmitted by heredity to his children. Only individual variations or modifications that are in-born or constitutional, the outcome of some inherent peculiarity in the germ plasm, are inherited. For instance, the practice of binding the feet of Chinese girls, carried on for centuries, has not affected the shape of the feet of the new-born Chinese infant. The custom of circumcision, enforced in certain nations for thousands of years, also serves as an illustration of this law. I hope that I am right in bringing forward the modern decay of teeth as another instance. Like the more direct mutilations first mentioned, it may be produced in one generation after another by ill-advised changes in environment or habits, but it is not, let us hope, hereditary. To this question, however, I hope to return later.

Latest Acquirements Unstable.

Another evolutionary dictum of special medical interest is that in the evolution of any species the latest acquirements are the more unstable: those structures or faculties, which have in the history of the species been most recently evolved, are the most liable to become deranged. The human brain in its present development is especially characteristic of our species. Its high development is a comparatively recent acquisition. But if the brain of man is more developed than that of the sheep, it is also more unstable. Insanity and neurasthenia are the diseases of human beings, not of lower animals. Similarly with the human hand, some of the muscles for moving the thumb are peculiar to our species; and it is, I think, these muscles and other muscles of the fore-arm concerned in fine movements of the hand, that are particularly liable to be effected by tenosynovitis, and writers' cramp. The human voice is another late acquisition of the human species. Possibly the complaint known as "clergyman's sore-throat" deserves mention in this connection. The faculty of speech and voice production involves control of a complicated nervous and muscular mechanism, which under stress is liable to get out of gear.

Applied Darwinism: a Therapeutic Maxim.

Turning now to the more practical side of the question, the Darwinian doctrines we have just glanced at seem to point to a therapeutic maxim of wide applicability. It is this—that when, under civilised conditions, an organ or faculty becomes deranged, a temporary return to more primitive conditions of working will favour its restoration to normal action. In other words, when the human organism has got out of gear, harmonious working will be regained more quickly by approximating more nearly to those earlier ancestral conditions, to which long ages of heredity have so closely adapted it. That seems to be a logical deduction from what has just preceded. Do not, however, suppose that this implies a return to a state of barbarism, where clothes and cookery are unknown. So thorough-going an application of the principle is evidently impossible. But short of such heroic measures, applying this principle in a temperate and rational manner, it may lead to valuable and practical suggestions. A careful analysis of the mode of life of our prehistoric ancestors will bring to light important factors and conditions which may be readily adopted by civilised man in the twentieth century in his efforts to prevent or cure disease.

Open-Air Treatment.

The modern open-air treatment of consumption furnishes a most notable example of this. The treatment in vogue fifty years ago may be described as a "molly-coddling" treatment, keeping the patients too much in close rooms, avoiding above all things a draught or cold current of air. This was certainly not a return to the primitive environment of the species, but a more complete divergence from it. This old-fashioned method was no doubt in its day supported by arguments based on the physiology of the time. But it was plainly in direct opposition to the fundamental principle we are considering. The molly-coddling system is now discarded as a failure. On the other hand, I believe that the open-air treatment will prove not the mere fashion of the day, but will, as time goes on, receive ever wide application. On the broad evolutionary ground indicated above, should we not urge its employment in many other diseases? Its use in pneumonia is already becoming more widely acknowledged, and probably in the near future it will become a matter of routine in many other complaints. In our schools, too, the system of herding children together for hours daily in imperfectly ventilated rooms has obvious disadvantages. It is one cause that contributes towards physical deterioration. Why should not the system of open-air schools, now adopted in a few instances for tuberculous children, be universally adopted for the public schools of the future?

Sedentary Life Unnatural.

Passing on from the respiratory to the circulatory system, there are two points to be briefly noted. Our prehistoric ancestors led a very active life: no food without exercise was the order of the day. To obtain food, and to escape from enemies, would in the keen struggle for existence involve a life of constant exercise. The circulatory system, in its anatomy and physiology, is adjusted to meet the requirements of an active, not a sedentary animal. One essential condition of a normal circulation of the blood, and still more of the lymph in many parts of the body, is that the adjacent muscles should be frequently called into action. Under civilised conditions the comparative absence of muscular contractions and relaxations leads to a feeble, sluggish circulation in certain parts of the body. This seems, perhaps, so self-evident a fact that it is unnecesary to call attention to it; but its importance is too commonly overlooked. The difference between a vigorous and feeble circulation in any part of the body may make all the difference between success and failure in resisting a local invasion by micro-organisms. The blood may be rich enough in opsonins and antibodies, but if the local circulation is feeble the tissues may not be supplied with a sufficient amount of these substances to resist the attacking microbes.

Exercise and Circulation.

Let us consider briefly three illustrations of the operation of this law. First, in the pharynx and naso-pharynx: the circulation of lymph and blood here depends very greatly on the activity of the surrounding muscles, the pterygoids and other muscles of mastication. Prehistoric man was compelled to bring these muscles into frequent and vigorous action, else he must starve. In modern times, cookery and milling machinery have relieved these muscles of 75 per cent. of their normal activity, especially in young children. The natural consequence has been a feeble and sluggish circulation, inadequate to ensure a healthy state of the local tissues. Hence come adenoids, naso-pharyngeal catarrh, and chronic hypertrophy of the tonsils, with all the evils that follow in their train.

LUMBAGO.

Let us apply the same line of argument to another common complaint—lumbago. The muscles of the back, in the days of our barbarian ancestors, would be kept constantly exercised by the frequent necessity of stooping to search for food in or on the ground. The vascular supply of these muscles was developed to suit this condition of vigorous activity. In civilised days many of us seldom, if at all, call these muscles into vigorous action. The circulation of lymph and blood in the loins becomes sluggish and inadequate, so that the muscles of that region are specially liable to be affected by the toxin or other agent that is the exciting cause of lumbago. The practical moral of this is, that after a patient has recovered from an attack of lumbago, he should be induced to devote five minutes every day to bending exercises, which, by bringing about a more vigorous circulation in the affected muscles, may render them less liable to a recurrence of the attack.

JOINT AFFECTIONS.

A similar line of reasoning may be applied in regard to many cases of mild chronic rheumatism affecting single joints, for example the knee or shoulder. One essential factor that needs to be remedied in such cases is the feeble circulation in the joint tissues, due to an absence of those full and frequent movements of the joint, which were inevitable in prehistoric days, but which are no longer enforced by the circumstances of the present day. The knee, for instance, is rarely completely flexed by the modern sedentary person; whereas, in primitive times, the natural crouching posture adopted in defæcation and at other times would involve complete flexion of the knee-joints on frequently recurring occasions.

GRAVITATION: THE ERECT POSITION.

The influence of gravition is an important factor in the physics of the circulation. The change from the quadrupedal to the erect position obviously added fresh complications to the hydrostatic problems nature had to solve. The erect position must make the influence of gravitation much greater. The tendency to deficient blood supply in the head, and to passive congestion in the legs and pelvis, must have called for the evolution of compensation mechanisms to counteract it. Piles and varicose veins are, in a sense, the consequences of our erect position, while some writers regard neurasthenia as being essentially similar in its origin, as being due to inadequate cerebral circulation resulting from the assumption of the perpendicular position.

COMPENSATING MECHANISMS.

Professor Leonard Hill has specially studied and described the compensatory mechanisms that exist for counteracting the undesirable effects of gravitation in the human circulatory system. It is to be noted that these compensating mechanisms are comparatively recent developments in the history of our evolution. Consequently different persons present great variations in this matter. In some individuals they are far more efficient than others. Some who have been less fortunate in this respect are unusually susceptible to the influence of gravitation on the cerebral circulation, so that, although possessing sound hearts and normal vessels, they will suffer from unpleasant sensations of faintness, and confusion of ideas, merely in consequence of standing still for several minutes. This condition may be met with in a man who is to all appearance quite strong and muscular, and who is capable of walking for miles—if he walks briskly—without undue fatigue. This condition is one that it is important to recognise for several reasons. I have only seen it referred to in Dr. Harry Campbell's very interesting book on "Treatment," to which I am indebted for several of the ideas in this paper. Dr. Campbell points out that such an idiosyncrasy would have an important bearing on the kind of exercise to be prescribed for a patient; cycling and riding would be most suitable; while leisurely walking, such as is usual in playing golf, is likely to be less beneficial. In the choice of a career, also, such an idiosyncrasy may be of importance. A medical student so afflicted would be well advised to devote himself to medicine rather than surgery, as it might seriously handicap him in performing surgical operations.

EYESTRAIN AND NEURASTHENIA.

With regard to affections of the nervous system, time will not permit of more than briefly touching on one or two points. In recent years eyestrain has come to be an important factor, frequently met with in the cases we have to deal with. In primitive times the human eye would be used chiefly for distant vision. The ocular muscles would be comparatively seldom called on to fix and focus objects nearer than eighteen or twenty inches. The constant strain involved in reading small print at a distance of ten or twelve inches or less for six or eight hours a day would be utterly foreign to the experience of primitive man. It is not surprising that the nervous strain involved in such a fine adjustment of the internal and external muscles of the eye should lead to headache and other nervous troubles if the effort is further complicated by astigmatism. That headaches may be the result of eyestrain has now become widely recognised. What is not yet so generally known is that neurasthenic symptoms and dyspepsia in many cases have a similar origin. In those cases commonly spoken of as "nervous breakdown," especially in students or others whose occupation involves much near work for the eyes, the possibility of unsuspected eyestrain being the cause of the trouble should always be borne in mind. Otherwise much valuable time may be wasted in rest cures, sea voyages, etc., when what is needed is suitable spectacles. Very slight degrees of astigmatism are enough to cause severe symptoms, and there may be no symptoms to attract attention specially to the eyes. In cases of dyspepsia, too, as Campbell points out, where none of the usual dietetic errors are present, astigmatism may prove to be the cause. My own experience confirms this. As bearing on nervous affections, we may notice in passing that the mental conditions of our ancestors before the dawn of civilisation included, among other things, a complete and blissful ignorance of their own internal anatomy. Their women-folk did not worry themselves into a hysterical or neurasthenic state because Dr. A. had told them the womb was out of place, or Dr. B. had said that they had a movable kidney! In many cases of movable kidney, indeed, the most important point in treatment is *not* to tell the patient of its existence. That is the statement of at least one reliable and modern textbook of medicine, which I heartily endorse. It applies perhaps with even more force to many cases of retroverted uterus, which cause no symptoms, but are discovered on making a vaginal examination.

PRIMÆVAL FOOD CONDITIONS.

Last, but not least, the alimentary system claims our attention. It is here, indeed, that the lessons of Darwinism are most obvious, most interesting, and most important. Let us review rapidly the dietetic conditions of the primæval man, going back to a period before family and social life were reached, before man had learned to herd sheep or cattle, or to grow corn. The contrast with modern times will be striking. To begin with, there was this stringent law governing food supply—no food could be had without exercise. Each and every meal depended for quality and quantity on the efforts of the individual concerned, whether man, woman or child. The only exception to this rigorous law would be the infant still under its mother's care. For young and old alike a satisfying meal would involve, as a preliminary, possibly a walk of several miles, a fatiguing hunt, or a good deal of tree climbing or digging for roots. This, then, was the first fundamental condition—no food without exercise. How would this affect individuals at different ages? We may safely infer that, in the keen struggle for existence, with barely enough food available for all, those in the prime of life would come off best, thanks to their superior strength and endurance. The child on the one hand, and the elderly person, male or female, on the other, would not fare so well. Obese old men and women, and obese young children, though common enough in our midst, would be conspicuous by their absence in those ancient days.

HYGIENE OF OLD AGE.

As regards old age, it is instructive to notice how Darwinism confirms the teaching of two eminent physicians of our own times, who themselves reached very advanced years. Dr. George Keith, of Edinburgh, who lived to be over ninety nears of age, wrote strongly advocating a spare diet after middle age was passed. With dry humour he points out that the famous physician, whose teaching was largely responsible for the vogue of the feeding-up system so fashionable in the latter part of the nineteenth century, died himself from liver disease "at the comparatively early age of fifty-eight." Sir Herman Weber, of London, who is, I rejoice, still enjoying a hale and hearty old age, has published in book form a lecture given some years ago on the means for the prolongation of life. He preaches and practises the continuance of active exercise in old age, advising a *daily* walk of six or seven miles in all weathers, with a walk of twice that length once a week. From what has preceded, it is clear that a spare diet, combined with regular and abundant exercise, would be the rule of life for grandfathers and grandmothers in the days of old. Advancing age would probably involve for them as great labour in gathering the daily ration as in the days of their prime, while the food actually obtained would be less. Such were the conditions to which the alimentary system of those past their prime was adapted through countless past generations. Darwinism would thus seem to confirm the statement made by Sir Henry Thompson in his "Food and Feeding," that those devoted daughters who insist on keeping their old people at home in arm-chairs and feeding them up with additional nourishment are really hurrying them to their graves!

FASTS BY FORCE OF CIRCUMSTANCES.

Passing on to another point of interest in primæval dietetics, it may be surmised that complete fasts, of longer or shorter duration, would be of common occurrence. Circumstances would often arise—such as bad weather, pursuit by dangerous enemies, human or otherwise—which would make it impossible to obtain food for a time. Our primæval ancestors must have often gone entirely without food for periods of half a day, or even for one or two days, while occasions on which only half rations were obtainable would be more frequent still. Certainly three square meals, on each of the three hundred and sixty-five days of the year, would never be the experience of any of them, so keen was the struggle for existence then. If we assume, therefore, that these were the conditions under which our ancestors lived up to the comparatively recent times when civilisation began, it follows that the alimentary system of our species is by nature adapted to these conditions. It is difficult to escape the conclusion, however unwelcome it may be, that an occasional fast may be a useful therapeutic measure. Indeed, there are, I think, enough data to hand from other sources to convince us that fasting as a therapeutic measure is deserving of serious consideration. The therapeutics of fasting should be thoroughly and scientifically investigated. Experiments on animals have shown that a fast produces an astonishing diminution in the number of micro-organisms in the alimentary canal. Clinical experience has proved the immense value of a fast of twenty-four hours' duration in the treatment of infantile diarrhœa, only water being given. At the 1910 meeting of the British Medical Association, Dr. Guelpa, of Paris, read an interesting paper, quoting some cases of remarkable improvement in diabetes and toxæmia as a result of repeated fasts of two or three days' duration. The pity is that fasting as a therapeutic agent has hitherto been advocated mostly by more or less unscientific cranks. The time has come when the whole subject should be put on a rational and scientific basis. In these days, when appendicitis and other diseases arising from an abnormal degree of sepsis in the bowel are so common, the possible usefulness of this Darwinian mode of treatment is sufficiently obvious.

OCCASIONAL FEASTS.

But the picture of primitive conditions just depicted is rather one-sided. Let us be fair, and admit that, though days of fasting and scanty meals were common, there would also be days of feasting. On rare, red-letter days, an abundance of food would be enjoyed, thanks to the success of the hunter, or through some lucky find of wild fruit in unusual profusion. I will not, however, take up time in discussing the therapeutic value of feasting. The popularity of the banquet at each of our Medical Congresses bears witness to the fact that we all appreciate sufficiently the virtue of an *occasional* feast.

MILK AND SUGAR NOT IN USE.

Turning for a moment to the articles of food availabe for our ancestors, there are at least three, which the modern housewife considers indispensable, which are entirely absent from the primæval dietary, namely cow's milk, butter and sugar in its present concentrated form. Milk feeding of invalids is at times much overdone. In infantile diarrhœa we have already discarded cow's milk. In enteric fever it has come to be regarded with less confidence and more suspicion than formerly. Milk is certainly not an article of diet to which the adult digestive organs were accustomed in primæval times. I would suggest a little healthy scepticism as to its value in some other diseases, where we have been in the habit of advising it.

The tremendous quantities of jam and manufactured sugar consumed nowadays are also quite at variance with Darwinian indications. The wholesomeness of sugar in its natural state in fruits, sugar cane or sweet roots, is no argument for its use in reckless fashion in the shape of the concentrated manufactured article. Trade statistics prove its consumption per head to have increased enormously in the last fifty years.

NO FEEDING WITHOUT MASTICATION.

Let us next turn to another of the fundamental laws of primæval nutrition which may be summed up in the words "no feeding without mastication." The coarse, raw, vegetable foods, on which our ancestors largely depended, would require very laborious mastication before they would yield up their starch and other nutritive ingredients to the digestive juices. In those days anyone who habitually bolted his food would starve; existence depended on thorough mastication. We have altered that: cookery and milling machinery in our day do most of the work of breaking up and softening starchy foods, which had to be done formerly in the mouths of our ancestors.

It is just beginning to dawn on us that this refinement of food, and consequent neglect of mastication, have been carried too far. The divergence from ancestral physiological conditions has been too great or too rapid. It is realised now that mastication is essential and necessary for other purposes than the softening and breaking up of hard food, so essential indeed as almost to justify the aphorism that a civilisation which neglects mastication is doomed.

CAMBRIDGE EXPERIMENTS ON MASTICATION.

Sir Michael Foster some years ago had some experiments carried out under his supervision at Cambridge University on the very thorough mastication of food. For some weeks some medical men and other observers made a practice of subjecting their food to an unusually thorough and prolonged mastication. Sir Michael Foster reported, as the result of their observations, that there was a general increase in the sense of well-being and the working powers of these gentlemen, while a marked change in the waste products of the bowel was noticed; the motions became odourless and inoffensive, suggesting that the bowel was in a healthier and more aseptic condition than is usual.

DARWINISM AND DENTAL DETERIORATION.

I have left to the last one most practical application of Darwinism, one which demands serious attention in the present day. The prevalent decay of the teeth of the rising generation has become a national evil. At the meeting of the British Medical Association, held last year at Birmingham, a special conjoint meeting of the Dental and Public Health Sections was arranged to discuss the subject of dental caries from a public health point of view. Some alarming statistics as to the prevalence of dental decay among English children were brought forward. In South Africa things seem to be rapidly progressing in the same direction. Let us consider the matter briefly from the Darwinian point of view. The first question to be settled is whether the cause of the change is to be found in the heredity or in the environment and habits of modern children.

The view was, I believe, advanced formerly that the chief factor at work was a diminution of the size of the human jaw, due to hereditary causes. It was argued that in the slow progress of evolution, the jaw was, for some occult reason, growing smaller. If that view were the true one, the outlook would be hopeless indeed: : anything that we could do would be of little avail to mend matters. That view, however, appears now to be discarded. From the very interesting discussion at the Birmingham meeting it would seem that our dental experts are becoming increasingly convinced that the main cause lies in the environment—that is to say, in the character of the food of the modern civilised child.

EVIDENCE FROM SOUTH AFRICA—LOCATION NATIVES

Here in South Africa we have some striking evidence that an altered environment may in one or two generations, produce serious deterioration of the teeth. I recently made a hurried inspection of the teeth of forty-five children in one of the native schools of the Burghersdorp Location Ten children presented more or less evidence of dental caries detected readily at a glance. Two children only, about five or six years old, had each three or four badly-decayed teeth. What first called my attention to this aspect of the question was being asked some years ago to extract three badly-decayed teeth (permanent molars) from a native youth of fourteen, the son of a native interpreter in a Government office. This youth had grown up in the Burghersdorp Native Location. Probably in his educated father's house more or less civilised foods were used, and I suppose that these, with the consequent neglect of mastication were probably largely responsible for the woeful state of the son's teeth.

DR. HARRY CAMPBELL'S OUT-PATIENT.

It is instructive to compare with this case one mentioned by Dr. Harry Campbell in an article on mastication published in the *Lancet* some years ago. Among his out-patients at a London hospital he noticed a man of fifty with a complete set of good teeth. Such a thing was so exceptional in a London middle-aged out-patient, that inquiry was made as to the man's habits. He was, he said, peculiar in this way, that he could not swallow his food unless he first chewed it very thoroughly. He was given a moderate-sized piece of bread, and asked to eat it in his usual way. It was found that he subjected it to one hundred and twenty separate bites before swallowing it. Here, then, we have a man whose masticatory instinct had not been weakened in the usual way in early childhood, but had in some way retained full activity. Although this man had for thirty years lived in London on the same kind of food as the average poor Londoner, at fifty years of age, instead of the usual picture of a mouth full of decayed teeth in unhealthy gums, he presented a full set of sound teeth set in healthy gums.

These two cases confirm, each in its own way, the view that environment and habits are the factors responsible for dental decay for the most part, rather than any hereditary factor. Like the mutilated feet of Chinese girls, dental caries is a defect produced anew in each successive generation, produced probably by faulty methods of feedings.

AN AGE OF PAP.

The contrast in diet that has been sketched between modern and primæval times is, as a matter of fact, most marked in early childhood, probably in the case of children from one to three years old. As Dr. Campbell says, this is the age of pap. For a generation we have instructed mothers to feed their little children, after weaning, on soft foods requiring no mastication—Mellin's Food and its congeners, milk pudding, bread and milk, porridge, mashed potato, and so on. In the discussion at Birmingham Dr. Sim Wallace spoke of such foods as "unhygienic." Certain it is that this dietary of soft foods, like the outworn molly-coddling treatment of phthisis, is *not* a return to primitive conditions of physiological working, but a divergence therefrom. Is it not a humorous position of things, that a generation of medical teachers, professedly evolutionists, should have been so blind to the true bearings of the case, and refused adequate exercise to the jaws of the growing child. We might have guessed that as soon as Nature provided the young of our own species with teeth, those teeth are intended to be used. The penalties of disuse have been serious. In this respect a change in the direction of primitive conditions is urgently called for.

EVIL EFFECTS OF PAP-FEEDING.

Expert dental opinion, as expressed in the discussion at Birmingham, brings a very serious indictment against the present fashionable system of soft foods for toddlers. It does serious injury to the child in at least three ways. First, it fails to call the child's masticatory instinct into normal healthy activity. Secondly, it cheats the muscles of the jaw and tongue of their natural exercise, necessary for their proper development; the result is that the jaw and nasal passages are stunted in their growth. Thirdly, it leads to soft and semi-liquid foods remaining clinging about the teeth without having been chewed, and therefore without being mixed with their due complement of saliva. This condition favours acid fermentation, and therefore also dental caries.

INDICATIONS OF CHANGE IN MEDICAL OPINION.

A revolution of our mode of feeding young children is urgently called for. Dr. Wheatley, Medical Officer for Health for Shropshire, who opened the discussion, laid down these rules for the guidance of mothers in the future:—All starchy food should be given in a form compelling mastication, such as crusts, crisp toast, rusks, etc. No starchy food should be given in the semi-liquid form, as is so commonly done now. It is useless to tell children to masticate their food if no food is given that compels mastication.

This most recent phase of medical opinion is clearly in close agreement with the principles deduced from Darwinian data in this paper. An unused jaw means a jaw with sluggish circulation, and therefore with unsound development of teeth. More than one speaker, in the discussion at Birmingham, emphasised the fact that, for the preservation of the teeth, the character of the food was of far greater importance than the use of the tooth-brush and antiseptic mouth washes. The subject is becoming one of national importance in South Africa as well as in England. The inferences drawn from the teachings of the evolutionists in this connection appear so obvious that their neglect in the past is a matter of surprise.

Before leaving this question of dental caries, it may prevent misconception to add, that this paper does not attempt to deal in any sense exhaustively with it. Only two or three points have been touched on, because they clearly come within the scope of this paper. These are—and their importance is such as to justify repetition—firstly, that the main cause is to be sought in the character of the food supplied to our children, not in any hereditary factor; secondly, that the jaws and teeth cannot be expected to develop normally, if the natural exercise involved in mastication is not allowed due influence. The excessive use of jam and sugar in various forms, to which allusion was made in an earlier part of this paper, is also blamed by dental authorities for its effects in damaging the teeth.

CONCLUSION.

In concluding these somewhat discursive remarks, I would urge that the line of thought here suggested may often prove of service in dealing with many other aspects of disease. Darwinism, applied in a reasonable and temperate manner, may sometimes furnish sounder guidance in treatment than the latest theories of experimental physiology.

CLINICAL RECORDS.

CASES SHOWN AT THE ANNUAL MEETING OF THE BRITISH MEDICAL ASSOCIATION AT LIVERPOOL IN THE SECTION OF DERMATOLOGY.

Dr. Stofford-Taylor and Dr. R. W. MacKenna showed between thirty and forty cases, the most interesting of which were the following:—

Demonstration of Cases.

1. A boy, æt. 14, suffering from incipient Pityriasis rubra pilaris. The evolution of the eruption, which had lasted for two years, was not yet complete, but on the palms of the hands, which were of a dull red colour, there was much thickening of the skin. Over the elbows and knees there were patches which suggested psoriasis, but on examination the scales were seen to be of a somewhat different type to the scales of psoraisis, and at the margins were seen crops of cone-shaped horny papules at the orifices of the hair follicles. The scalp and face were also slightly affected with dry scales.

2. A case of Nævus lymphaticus on the neck in a young girl. This case excited much interest because of its rarity.

3. A very extensive case of Lupus exfoliativus and follicular lupus in a man, æt. 42. The duration of the affection was about five years, and the parts chiefly affected were the trunk and legs. The arms, in addition to showing many tubercular deposits in the skin, had several hard subcutaneous nodules apparently attached to the muscle and tendon sheaths. A microscopical examination showed these nodules to be tubercular.

4. Six cases of Lupus erythematosus, in none of which was there any tubercular history. In two the affection was most severe on the scalp, and in one, besides the skin, the mucous membrane of the lower eyelid and the upper lip was involved.

5. A case of Lupus vulgaris on the cheek, which had been treated with zinc ions. A photograph of the patient before treatment was also exhibited, and the great improvement and the fine scar were distinctly visible.

6. A very extensive case of Lupus verrucosus in a girl, æt. 22. The eruption had affected both hands and both arms. It had been treated with zinc ions, and was completely cured. The fine scar, soft and pliable, was generally commented upon.

7. A case of Lupus vulgaris, affecting the outside and inside of the nose. The hard palate was also involved.

8. A case of Lupus pernio in a man, æt. 32. The ears, hands, and feet were chiefly affected, and the disease had produced considerable destruction of the ears. Treatment by means of inhalation of oxygen had been suggested.

9. Two cases to show the method in use at the Liverpool Skin Hospital for dressing children suffering from eczema of the scalp and face. The method consists in spreading the ointment or paste which is to be used on lint which has first been soaked in cold water. The face of the paste or ointment is covered with fine muslin to prevent too close adhesion to the skin and to facilitate drainage. The dressings are held in place by means of specially knitted nets, and are cool and very effective.

10. A case of Recurrent papulo-vesicular Eczema in a man æt. 38. This patient was shown to illustrate Dr. David Walsh's paper on the association of recurrent affections of the skin with cardiac lesions. The man has had a recurrent eruption, which has appeared at the height of the hot season each year for the past four or five years. On auscultation he was found to have an aortic obstructive murmur with some regurgitation through his mitral valve. He was quite unaware of any heart trouble.

11. A case of *Erythrodermie pityriasique en plaques disseminées* in a young man. The condition has persisted for several years, and affects chiefly the arms and trunk. It is characterised by little round or oval yellowish-red patches, which are slightly scaly. There is no infiltration. The eruption can be removed by the use of chrysarobin, which is the only remedy which seems to affect it, but it recurs again within a week of the cessation of treatment.

12. A case of Lichen pilaris in a lad. The condition has persisted for two years. There were no subjective symptoms. The lesions consisted of patches of fine spines, projecting from the pilo-sebaceous orifices, and were distributed in the limbs and trunk.

13. A severe case of Zerodermia in a young woman. The condition was universal. The patient is the only member of the family affected.

Dr. Savatard showed: (1) A case of Follicular lupus in a woman, æt. 25. About three and a half years ago patient suffered from an acute inflammation of the bridge of the nose. The nasal passage was not obstructed. After the inflammation subsided a rash broke out gradually on the face and had remained in a stationary condition up to her coming to the Manchester and Salford Skin Hospital in September, 1911. There were at that time on the face numerous discrete apple-jelly coloured lesions—not raised above the skin surface—irregularly circular in outline and 1—3 inches in diameter, many of which showed central pin-point necrosis. Several had involuted, leaving small depressed scars simulating acne pitting. There was no evidence of any coccogenic infection. The lesions were most numerous over the bridge of the nose, extending upwards between the eyebrows to the forehead, and some few on the cheeks and chin.

2. A woman, æt. 25, with primary Lupus vulgaris of the scalp (treated by tuberculin ointment) with Tuberculous Elephantiasis of the left leg.

3. A woman, æt. 23, with Pendulous neurofibromata of the right leg, appearing in infancy, with smaller scattered neurofibromata of recent origin on the trunk and innumerable *café au lait* patches over the whole body.

4. Man, æt. 27. In April, 1911, patient was taken acutely ill. His face, trunk, and limbs were swollen. Three weeks later he saw Dr. Stopford-Taylor at Liverpool. After three months the excessive scaling disappeared and his general condition was much improved. The skin, however, remained rough. It was fairly well up to the early part of this year when he had a relapse and again visited Liverpool, but as he became progressively worse he came to Manchester and was admitted to the Manchester and Salford Skin Hospital on April 18th, 1912. On admission he had what was apparently an extensive seborrhœic dermatitis. There was considerable branny desquamation but no flaking. There was no rise of temperature nor any subjective symptoms except the feeling of *malaise*. The urine was normal. After a week's treatment with a mild sulphur ointment there was very considerable improvement and the patient said he felt quite well. Since then the eruption has almost entirely cleared only to return again, though treatment has been continued. About a month ago his condition showed a widespread desquamating dermatitis—papular in character, non-follicular—the papules are flat-topped but slightly raised above the surface of the skin and well marked on the backs of the hands. They are also evident on the scalp, trunk and extremities, with areas from which the eruption had cleared leaving the normal skin markings much exaggerated. The exhibitor considered the case one of Exfoliative Dermatitis.

5. Youth, æt. 19. Monilithrix, or beaded hair. The condition is limited to the hairs of the scalp, and began two years ago. It is most marked in the frontal and occipital regions, where the hairs are broken off, leaving short, beaded stumps. Many of the longer hairs, which appear normal, are also seen to be affected on closer examination. On staining no micro-organisms can be detected. There is some keratosis of the follicles and in the occipital area well-marked perifollicular inflammation is present. There is pain and irritation of the scalp, otherwise the patient's health is good.

Stokesley Rural District Council has agreed to take part in a conference called by the Thirsk Rural District Council to consider a scheme to appoint a whole-time Medical Officer for certain combined rural areas.

OPERATING THEATRES.

BOLINGBROKE HOSPITAL.

Traumatic Rupture of the Liver.—Mr. Swainson operated on a man, æt. about 25, who two or three hours previously had been run over by a heavy tip-up cart, which was empty at the time. The wheel had passed transversely over the epigastric zone of his abdomen. When seen he was lying on his back in bed, respiration somewhat hurried and alæ nasi working; the face was rather pale, but did not show great anxiety. On examining the abdomen, there were practically no movements of abdominal respiration, the recti above the umbilicus being held and feeling quite rigid. The patient complained of some epigastric pain, and tenderness was present in this situation. below the umbilicus, however, there was no tenderness, and rigidity, though present, was not marked. There was nothing very remarkable about the pulse, the rate being 85, the beat not irregular but somewhat feeble. The temperature was normal, and had been sub-normal on admission. There was no vomiting. The abdomen was slightly tumid, but there was no marked distension. Thus the patient might be said to be suffering from slight shock, the only positive symptom besides pain being marked rigidity. Further, as before remarked, there was a distinct history of severe injury. Under these circumstances it was decided to explore the abdomen.

An incision was made in the epigastric region very slightly to the left of the middle line, reaching just below the level of the umbilicus. On cutting through the peritoneum some blood escaped, the appearances being, in fact, exactly similar to those found in operating on a ruptured ectopic gestation. The hand was passed down to the neighbourhood of the spleen, and by palpation and inspection it was ascertained that this organ was free from damage. On mopping up the blood with large, dry, sterile abdominal sponges, the left lobe of the liver also appeared to be free from damage. The hand was now passed down to the under surface of the right lobe of the liver, and a deep rent was found in it, into which four fingers of the hand could easily be passed. This was plugged temporarily by a large abdominal sponge, and a transverse incision about six inches long was made just below the middle of the first incision at right angles to it, so that a flap could be turned up. The rent in the liver was now plugged with a long roll of gauze, the end of which was left hanging out of the right extremity of the transverse incision. No alimentary contents or mucous membrane was seen on hurriedly examining the abdominal viscera. The abdomen was sponged dry with large swabs, and the wound quickly closed, except where the gauze had been brought out, by interrupted sutures passing through all the layers, of the abdominal wall. The patient was put to bed, and saline solution administered continuously by the rectum.

Mr. Swainson said he wished to emphasise the importance of exploring these cases early if there were a reasonable suspicion of abdominal injury. Abdominal injuries resemble each other very closely in their early stages, and early operation was much more likely to be successful than late. Incidentally, he said the same remark applied to the acute abdominal conditions arising from disease, such as the perforations and the acute inflammations. He had already mentioned the presence of extreme rigidity in this case. He considered rigidity the most important sign in acute abdominal cases, because it was manifested early when shock and alteration of the pulse might be absent. It was quite true that it was not always easy to distinguish pathological rigidity from that form of rigidity which patients manifested when nervous; this could be partly discounted by experience and by examining the case quietly and soothingly with warm hands. Some cases of colic also gave rise to rigidity, but here the history and the nature of the pain were helpful in arriving at a diagnosis. Next to rigidity, perhaps, the pulse was the most important thing: a pulse-rate steadily rising to 120 or so was very suggestive of an abdominal catastrophe. Shock, he remarked, was a very important symptom, but severe shock could be present in the absence of a gross lesion, and severe injuries, such as rupture of the intestine, were sometimes not accompanied by shock at first. Vomiting was an equivocal symptom, but was suggestive of abdominal mischief. The Hippocratic facies, when present, was also important, but it might be absent. Sudden and intense pain was a very important symptim. Progressive pallor, sweating and restlessness were signs suggestive of severe hæmorrhage.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Aug. 31st, 1912.

Tissue Changes Produced by the Action of Radiothorium.

This subject has been recently investigated by, amongst others, Dr. Prado Pagle in the Experimental Biological Department of the Pathological Institute of the University of Berlin. In his report of the investigations Dr. Pagle first recapitulates some of the results arrived at by other inquirers. By the labours of Hertwig he says proof has been found that by irradiation of eggs by the rays of mesothorium the same effect is on the whole that produced by irradiation by radium. Bickel, in raying experiments on himself, found that the rays produced first reddening of the skin, later the production of an ulcer, with subsequent cicatrisation. In these experiments, only the *b* and *g* rays could have had any effect, as the mesothorium was enclosed in a metal capsule under a mica plate. It was, therefore, certain that the *b* and *g* rays set up changes that were partly of a productive and partly of a regressive nature.

The question arose whether the alpha rays could also cause tissue changes, whether in particular the products of tissue change of mesothorium which emitted principally *a* rays had any action. The first decomposition product of mesothorium was radiothorium, which had a mean life of 1,063 days, and emitted *a* rays. The further decomposition product was thorium X with a mean life of 5.85 days; it produced *a* and *b* rays. The gas producing emanation from thorium X with a half decomposition period of only 53 seconds emitted *a* rays only.

At the request of Hr. Bickel the following experiments were made: Small deposits of an insoluble combination of radiothorium were placed under the skin of mice, and were allowed to remain there for some time, the animals were then killed, and the parts subjected to careful microscopic examination. For control purposes he injected charcoal into other mice in a similar manner.

Without going into the details of the experiments the general results were to the effect that radiothorium had an undoubted active effect when brought into close contact with tissues. Every experiment made gave proof of this. The charcoal injected into the control animals set up no reaction whatever. During the first few days the radiothorium set up a real inflammation: capillary dilatation, exudation, leucocytary infiltration. No trace whatever, after most careful search, of any micro-organisms was to be found. After a more prolonged action of the radiothorium there was caryolysis, necrosis, and increase of the fibro-blasts. The particles of radiothorium, which were numerous and large during the first few days after the injection, became gradually fewer and smaller, in some parts they were absent altogether, and in their place were only fibro-blasts and connective tissue in the form of round patches, in which the original particles of radiothorium were embedded. In the course of time these also became quite absorbed. Finally, the necrotic particles were also absorbed, and out of the fibro-blasts fibres of connective tissue were formed which at last terminated in cicatricial tissue.

At the Verein f. innere Medizin and Kinderheilkunde, Herren Meyer and Schmitz related the subject of their experiences in experimenting on the

Nature of the Tuberculin Reaction.

The theory of the action of tuberculin had been the subject of an extraordinary amount of discussion, but the last word had not yet been said. Koch held the view that tuberculin was of a toxic nature, that it set up necroses both in healthy and tuberculous individuals, but that it acted most profoundly in tissues that were tuberculous. This was also the view of Ehrlich. Wassermann placed the matter on a serological basis. He assumed that in a tuberculous centre both tuberculin and anti-tuberculin were present, that by the introduction of tuberculin into the system the anti-tuberculin combined with the tuberculin, and that a digesting and destructive process was set up by the resulting complement. This theory had been further elaborated by Citron, who had introduced receptors. Then there was the Woolf-Eisner theory of lysis.

The aim of the investigators had been to determine what the substance was that reacted with the tuberculin. For their purposes they made use of bovine tubercle in rabbits that were infected by that form. If the blood serum of animals infected with bovine tuberculosis was allowed to stand 24 hours mixed with bovine tubercle and then injected into healthy animals, these became ill with considerable rises of temperature and other symptoms of disease. The serum from animals with advanced tuberculosis acted the best. A still stronger reaction was obtained, when washed blood corpuscles were made use of instead of serum. Defibrinised blood acted in the same way when brought into contact with tuberculin. Also when the washed blood corpuscles of tuberculous animals were allowed to react with tuberculin and saline solution, and the mixture was then centrifugated so as to again separate the saline solution, and this was injected into healthy animals, these also suffered from rises of temperature. This, however, never took place when the blood of healthy animals was made use of. If animals had once reacted strongly after injection with tuberculous serum the reaction was weaker on further injection. If, however, the reaction was at first weak there was a stronger reaction after the second injection. Heating above 65° C. did not destroy the bodies that allowed the reaction.

These experiments therefore showed that a substance circulated in the blood of an infected animal, combined for the greater part with the red blood corpuscles, and which, combined with tuberculin, set up symptoms of disease with a febrile reaction in healthy animals.

AUSTRIA.

Vienna, Aug. 31st, 1912.

Artificial Impregnation.

It is so often necessary and desirable where coitus fails to impregnate, that operative means have to be resorted to. The barren condition often existing in married life is due to many causes, but the primary one is to prevent the sperm from wandering into places where the potency of the spermatozoa is lost. In many cases sterility is due to the female where the uterus has been inflamed, or is displaced, and thus prevents the sperm from getting beyond the vagina. The male may also be the cause of unfruitful condition from bad health, inflammation of the genitals, infantilism, syphilis, gonorrhœa, etc. If all unhealthy conditions in the male are absent it is easy to produce pregnancy by mechanical or operative means by conducting the sperm carefully into the uterus. Slight inflammation of the uterus or adnexa will not prevent a successful experiment. An undeveloped uterus or vaulted vagina should not prevent the performance of the operation, but a healthy sperm is necessary for success, and should be carefully examined with the microscope for the products of gonorrhœa. Hirsch has found the following *technique* the most successful. The sperm is first obtained from the " condum " with a dry sterilised Braun's syringe, avoiding as much as possible any other fluid, so as not to disturb or weaken the spermatozoa. Warming the syringe to 38° C. is necessary, and this must be done carefully by a metal plate heated at one end by a spirit lamp, as the spermatozoon is very sensitive to heat and cold, and must be maintained at a constant temperature. Another important point in the operation is the entrance of the syringe into the portio of the uterus, taking care not to wound the mucous membrane, and small quantities of the sperm must be injected at one time, else uterine colic may be induced. Having inserted the necessary amount, the patient must lie in bed eight to twenty-four hours, and all washing of the vagina must be avoided, but a tampon should be placed at the mouth of the uterus.

The Influence of Benzol on Leucæmia.

Koranyi has been using benzol in cases of leucæmia with best results. The white corpuscles disappearing in a short time or by the end of the third week with an increase of erythrocytes. It is effectual in all forms of chronic leucæmia with a reduction of the glands. Patients who have been treated ineffectually by the Röntgen rays yield readily to benzol. Small doses are useless, as 3-4 grammes must be given daily, and sometimes in stubborn cases for months. The only bad effects the treatment has is the burning in the stomach, sometimes vomiting, bronchial trouble and vertigo. The gastric disturbance may be avoided by giving it in capsule, and the vertigo by reducing the quantity in the dose. He has found it more effectual than the Röntgen or Thorium therapy.

HUNGARY.

Budapest, Sept. 1st, 1912.

At a recent meeting of the Budapest Royal Medical Society, Dr. A. Bürger read a paper on the

Ætiology of Prolapsus Uteri.

Dr. Bürger advanced an interesting theory as to the causation of this condition. He related a case where in a new-born child there was complete prolapse of the vagina and uterus, degeneration and atrophy of certain groups of muscles in the lower extremities, atrophy of the pelvic floor musculature, as well as sensory paralysis of the lower limbs and the trunk as far as the upper border of the spina bifida. Bürger believes that this case will explain the cases of uterine prolapse occurring in women who have never borne children (about 3.5 per cent. of the cases). In these instances the factors usually brought forward are insufficient, such as manner of living, occupation, venereal excesses, improper nourishment, inflammations and tumours. Freund, a German gynæcologist, attributes the condition to infantilism—said Bürger—others to an insufficient development of the peritoneum. In searching the literature, the reader has found 14 cases where this dislocation of the organs was already noted in a newborn child, ten of these also presented a spina bifida. He therefore sets aside the supposed influence of an infantile condition or the constitution of the peritoneum, and concludes that the association of spina bifida, atrophy of the pelvic floor muscles, and genital prolapse can be attributed to some disturbances of the sacral nerves, which results in the production of the anomalies in question. This view seems to be confirmed by instances seen in older individuals, where some injury affecting the sacral plexus is followed by not only a primary nervous disturbance, but also a secondary uterine prolapse.

Gonorrhœal Phlebitis.

Dr. Guzmann exhibited a case of this rare complication of gonorrhœa. The patient was a young man, who developed a marked phlebitis in the lesser saphenous veins about four weeks after an attack of acute gonorrhœa had apparently subsided. This gradually disappeared with the use of evaporating lotions. From a study of 26 cases thus far reported, it seems that the affection is usually present in young men during the sub-acute stage of a first attack of urethritis. In most of these cases an arthritis was also present. Varicose veins were seen in only one instance, so that this condition cannot be looked upon as a predisposing factor. The saphenous vein seems to be most often involved. Pain and œdema are the main symptoms and six weeks the usual duration. Dr. Guzmann believes that the infection is due to the rupture of some hitherto unrecognised focus, probably in the prostate, from which the septic material enters the venous system. The treatment is the same as that of phlebitis in other parts.

Treatment of Urticaria.

Dr. Csillag said, that acute urticaria may be caused by an irritating parasite, such as a flea or bedbug, or by some irritating plant. Frequently the eating of certain food, such as shell-fish or certain remedies, such as balsams or chloral. Treatment consists naturally of a light purgative, some intestinal antiseptic, such as salol, or benzo-naphthol, and quinine or alkalies. Low diet for a few days is necessary. For the pruritus, carbolic or evaporating lotions are necessary. The following prescription is useful:—

℞ Carbolic acid, pure, 2.00 gr.
Glycerine, 50.00 gr.
Water, 150.00 gr.

Lotions of chloral hydrate, 5 to 200, neutral dusting powders of chalk, starch, zinc oxide, with camphor finely pulverised one to two per cent. A useful ointment is:—

℞ Zinc oxide, 3 to 5.00 gr.
Cocaine hydrochlorate (or menthol), 0.3 to 0.60 gr.
Vaseline, 30.00 gr.

Hot or cold baths are not as useful as tepid baths. If the pruritus is rebellious, it is necessary to have recourse to a protecting envelope, either an application of a paste or plaster. In the grave urticaria of auto-intoxication prompt treatment by laxatives or emetics, and in case of collapse, subcutaneous injections are necessary. Œdema of the glottis is a serious danger of acute urticaria. Hot foot-baths and hot applications to the neck, hot fumigations, and the administration of ether, Hoffmann's anodyne and acetate of ammonia. In spite of this, sometimes tracheotomy is necessary. In chronic urticaria, careful dieting, forbidding the use of wine and other alcoholic beverages, acid or fermentable, or indigestible foods of any kind. Bowels should be moved by gentle laxatives. The dyspepsia, or atonic condition of the stomach is best treated with the use of absorbing powders, antiseptic or alkaline, such as charcoal, chalk, sodium bicarbonate or magnesia. Renal insufficiency may exist, or the uric acid diathesis. A definite vasomotor neurosis may be present. All of these call for definite treatment.

UNITED STATES OF AMERICA.

New York, Aug. 27th, 1912.

Bubonic Plague in Porto Rico and Cuba.

Bubonic plague has been in evidence in Porto Rico for some time and in Cuba for a few weeks. The situation in Porto Rico is somewhat serious. In San Juan there have been some forty cases reported and twenty-seven deaths. The latest account is that new cases have been reported in Porto Rico and Cuba. A Commission consisting of Col. Jefferson R. Kean, Major Frederick F. Russell, Lieutenant Fred H. Foucal, and F. Y. Howard were sent from Washington to make a thorough investigation in Porto Rico. Unofficially it was stated that while the disease seemed to have been checked in San Juan the Commission considered that it would be impossible to eradicate it until modern sanitary methods had been introduced, and especially until all the dwelling houses had been raised from the ground. The port health authorities of the United States are said to be watching the situation and taking steps calculated to keep the disease out of the country.

Something of a sensation was created by a statement issued by Dr. Juan Guiteras, Director of Sanitation of Cuba, the well-known yellow fever expert, and formerly of the U.S. army. Dr. Guiteras takes exception to a resolution introduced recently in the United States House of Representatives recommending an investigation of the sanitary condition of Cuba. Dr. Guiteras proves by comparative figures that the health conditions in Cuba are far better than in the United States, Porto Rico, or Panama. Moreover, he brings the charge that the United States is trying to conceal the existence of the plague in San Francisco, whence, he says, is the source of Cuban infection, and he draws attention to the yellow fever epidemic of New Orleans in 1905, when, he declares, Cuba was infected in a similar way.

According to Dr. Guiteras, this is a very inopportune time for the House of Representatives to censure Cuba, inasmuch as that island has already given a lesson in promptness by frank recognition of the existence of the plague and by energetic action in meeting the situation. He is of the opinion that the United States would do well to follow this example in the cases of California and Porto Rico. Dr. Guiteras further insists that Mexico was infected with the plague through the concealment of its existence in San Francisco. Dr. Guiteras goes on to say "The Panama papers quote officials of the United States as saying that the infectious diseases in Cuba are a menace, but they have been misinformed as to the situation in Cuba. As a matter of fact, the conditions in Cuba are better than in the United States, and the United States in reality is a menace to us with its epidemics of spinal meningitis, infantile paralysis, and small-pox, which do not exist in our Republic. We are constantly in fear of small-pox infection from the United States. Moreover, the plague situation in California and Porto Rico is causing us much anxiety."

It should be said that if plague be present in San Francisco, the authorities have been remarkably successful in preventing the news thereof to leak out. In no medical or lay journal has a hint been given that bubonic plague exists in California. If such be the case, it would seem that Dr. Guiteras has a legitimate cause for his outspoken remarks.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

NEWSPAPERS AND DOCTORS.

To the Editor of The Medical Press and Circular.

Sir,—I think that your quotation from *Reynolds' Newspaper* (in this week's "Current Topics") *re* the doctors and the Insurance Act should call for our sympathy rather than indignation, as it conclusively proves that the writer has not yet grasped the reasons why the doctors refuse to work the Act. In stating that we do so because we are only gaining 50 per cent. more than the societies paid us before the Act is to talk arrant nonsense, which will be apparent to even the casual reader. No mention is made of "picked lives or wage limit," and the 50 per cent. gained on certain clubbers will be more than lost on unsatisfactory lives, not to mention the 300 per cent. and more lost on patients who are now private patients, but who would, if we consented to work the Act, come under the Act. The other letter, "The Lunacy Act: A Strange Case," is unworthy of consideration, as the writer of it is anonymous, and, as you point out, the facts of the case are unauthenticated. Let the writer sign his name, prove the correctness of his statements, and then investigation would speedily follow. The narration of the case is merely the peg upon which the writer wishes to hang the hat, and the hat is the vilification of the members of the medical profession. The fact of the matter is this: As long as the medical profession allows itself to be sweated without complaint, so long is its nobility paraded in newspaper columns; but as soon as the members say, "We have to live, to educate our families, and to pay our way, and we demand a living wage," then newspapers of a certain type pour forth the vials of their wrath upon our devoted heads. I find that thinking people, both rich and poor, understand our attitude towards the Insurance Act, and express the hope that we shall remain united and frustrate the knavish tricks which would impoverish the profession, and instead of im proving the health of the community would have the exactly opposite result. Time now devoted to reading would be wasted in filling up forms which would benefit nobody except the army of paid officials now being created by the present Government.

I am, Sir, yours truly,
S. J. Ross.
Bedford, August 31st, 1912.

ANOTHER DOCTOR'S WIFE ON QUACK MEDICINES.

To the Editor of The Medical Press and Circular.

Sir,—It is certain that the "Doctor's Wife" hailing from Birmingham, whose letter appeared in your issue of August 28th, does not stand alone. My experience tells me that there are few doctors' wives, being educated women, who do not dip more or less deeply into medical journalism. This is probably mostly the case among those, like myself, taking part in work among the poor, are brought into contact with public health questions. We do not, however, often write to the medical papers; perhaps some of us are a bit afraid of our husbands; some think, perhaps, their letters would stand no chance of publication. I agree with "A Doctor's Wife" that our knowledge, if made available, might be of value to the family practitioner, and I am not sure that it might not be an advantage if, to encourage our contributions, you would set apart a column for doctors' wives! I can add my testimony to that of "A Doctor's Wife" with regard to the evil being wrought by quack medicines mostly composed of alcohol. To put a stop to the quack medicine trade calls for a crusade. If Dr. Mary Sturge could begin with the alcoholic tonics she would not, I fancy, lack followers, and she would encourage others to attack evils equally harmful. Personally, I think the Medical Press is to be commended for keeping this question always to the front. It is impossible, for reasons you have so often explained, to get it into the lay papers; but there are laymen of the right sort who read medical papers, and who are worth keeping informed on such matters.

Although leaving it till the end, I am not going to put the main subject of this letter in a postscript in the fashion that women are often charged with adopting. I really, in starting, intended to speak only of the harm which arises from the use of baby-quieting medicines, and to ask whether Dr. Mary Sturge, and other women doctors, could not take up this evil and expose it with a view to helping legislation against it. These evils, among the others arising from the quack medicine trade, have been fully described in your paper. Every visitor among the labouring class can bear testimony to the fact that if only by causing mothers to put confidence in them till too late, quack medicines for babies help in the killing of great numbers of the children of the poor every year.

I am, Sir, yours truly,
Another Doctor's Wife.
Glasgow, August 30th, 1912.

THE INTERNATIONAL DENTAL FEDERATION AT STOCKHOLM.

To the Editor of The Medical Press and Circular.

Sir,—So far as I am aware, it does not seem that your excellent paper, or any of its medical contemporaries, are represented by correspondents at this Congress, and so I venture to send you some brief report of salient features, and some reflections upon them. The meetings are being held in the hall of the University, and the Federation is receiving the heartiest welcome and support from all the authorities, headed by the King and the Minister of Education. The King held a levée for the Federation, and singled out the President, Mr. W. B. Paterson, of London, in order to express his good wishes for the success of the work. In his address the President dwelt on the work accomplished by the Federation since its last visit to Stockholm in 1902, when the international dental hygiene movement was inaugurated, and on the high position attained by the Federation as an advisory body, consulted by Governments on dental education and hygiene. Reports from other countries showed that gradually increasing interest was being taken in the question of oral hygiene and dental treatment as an integral part of public health. The care of the teeth of school children was one of the chief topics of discussion. In Germany there now exist 120 school dental clinics and 25 in Sweden. London has seven dental clinics, and some 20 others are established, or projected, in the provinces. In Denmark King Christian and in Holland the Queen Mother display personal interest in this matter. The United States Government has appointed 60 dental surgeons with commissioned rank to the Navy. The Sea Service is thus placed on the same footing as the land forces in respect of the *personnel* and status of dental officers.

The next Congress is to be held in London in August, 1914.

And now for my brief reflections. In the year 1858 the College of Surgeons, after thorough deliberation, having become convinced of the necessity for the institution of a special education for dentists, obtained through the new Medical Act powers for creation of a degree, to be styled the Licence in Dental Surgery. It was, however, not until 1878 that legislative sanction was given to dental reform. By the Dentists Act of that year dentistry received final recognition as a branch of the medical profession, was affiliated to that profession, and placed under the same direction and control. The prolonged inquiries which proved the need for this measure fully established the fact that ignorance in dentistry, as in every department of surgery, is closely allied to cruelty; and, that, although the uneducated dentist does not, like the surgical operator, deal with issues of life and death, he must, however honest and well-intentioned, constantly inflict pain and injury which might be avoided, and very often must, by improper treatment, aggravate the mischief which he seeks to relieve.

The penal clauses of the Dentists Act, like those of the Medical Acts, were designed to enable the public to distinguish between qualified and unqualified practitioners. In this they have entirely failed, and it would be farcical, if it were not so serious, to notice that the fraudulent quack dentist, although he may not with impunity actually style himself "dentist," may use the words "dental surgery" in his advertisements, and palm himself off upon the public without difficulty as a duly qualified man. The quack is able to take the bread out of the mouths of qualified men, and by degrading the status of dentistry he is arresting the entry into the profession of the class of men who, not content with the dental diploma, are willing to work for the highest qualifications that the Universities and Medical Colleges have to bestow. It will be a good thing when the whole story can be authoritatively made public, and I trust that the Medical Press, in the endeavours it is continuously making to promote Parliamentary inquiry, will not omit to include the dentists' case. The appointment of the Committee on Patent Medicines was in no small degree due to the labours of your paper; it ought to be encouraging towards further efforts in like directions.

I am, Sir, yours truly,
An Occasional Correspondent.

MEDICAL OFFICERS OF HEALTH AND SANATORIUM BENEFITS.

To the Editor of The Medical Press and Circular.

Sir,—It is of the utmost importance that the national campaign against tuberculosis should be launched on right lines. To use the machinery of the office of the local Medical Officer of Health may be the easiest course, but it is not the best one. Agreed, consumption is an infectious disease, but it cannot therefore be dealt with in exactly the same way as other notifiable diseases; and the Medical Officer of Health—already overworked—is not of necessity an expert on diseases of the chest.

What is required is a whole-time tuberculosis officer, who is a recognised expert, to act as consultant in friendly co-operation with the local family practitioner in the combat with this scourge. That, clearly, is the proper line of attack, and not the relegation of the whole matter to a department, which—important ally though it be in improving the public health—is, in the matter of tuberculosis, in many instances out of touch with the actual treatment of patients.

Medical Officers of Health may be experts in diagnosing infectious diseases in the ordinary acceptance of that term; but the fact that tuberculosis has recently, and rightly, been included in the list by official decree does not endow this important service with a special training in diseases of the chest. They cannot become specialists in a moment. Efficiency in this matter can only be attained by separating the duties of the tuberculosis officers from those of the Medical Officers of Health.

I am, Sir, yours truly,
J. Webster Watts,
Secretary, National Medical Union.

National Medical Union,
Manchester, August 30th, 1912.

OBITUARY.

MR. CLINTON T. DENT.

We deeply regret to announce the death of Mr. Clinton Thomas Dent, Senior Vice-President of the Royal College of Surgeons of England, which took place last week in a West End nursing home, at the age of 62. The deceased, who was the fourth surviving son of Thomas Dent, was educated at Eton and at Trinity College, Cambridge. He studied at St. George's Hospital, qualifying as M.R.C.S. in 1875, and becoming F.R.C.S. two years later. He was also an honorary M.C. of Cambridge University. Mr. Dent's work as a Consulting Surgeon was well known. At St. George's Hospital he was House Surgeon in 1876, and between 1877 and 1897 held the teaching appointments of demonstrator of anatomy, surgical registrar, joint lecturer in physiology, lecturer in practical surgery, and demonstrator of operative surgery, and, since 1897, had been joint lecturer on surgery. By holding the appointment of Assistant Surgeon from 1880 to 1895 he established a record for the longest period that any member of the assistant staff had held office at the hospital. He became Full Surgeon in 1895, and was appointed Treasurer of the medical school in 1900. He was also Chief Surgeon to the Metropolitan Police and Consulting Surgeon to the Belgrave Hospital for Children.

As an Alpine climber Mr. Dent had attained considerable eminence, and an account of his expeditions would fill volumes. His first ascents were fairly numerous when account is taken of the fact that he entered upon his Alpine career a few years too late for the period when, in the words of Mr. William Mathews, "new ascents were as plentiful as blackberries." But his achievements were such as even those who founded the Alpine Club might have been proud of. He made the first ascent of the Aiguille du Dru after 18 unsuccessful attempts. A worthy sequel to this fine piece of work was the first ascent of the Rothhorn from the Zermatt side, the first ascent of that great peak having been that of Messrs. Leslie Stephen and Grove from Zinal. To Mr. Dent is due the credit of a minor expedition for which visitors to Saas owe him hearty thanks—the ascent of the Portienhorn, a little peak of engaging character. Mr. Dent's work in the Caucasus was in some respects even more valuable that what he did in the Alps, for in the days he climbed there the Caucasus needed exploring as well as climbing. To him fell the sad task of searching for the bodies of Fox and Donkin, who were killed on Koshtantall in 1888.

He joined the Alpine Club in 1872, was elected to the Committee in 1874, was Secretary from 1878 to 1880, Vice-President in 1884, and President in 1887. He took a large part in editing the Mountaineering volume of the Badminton Library, and published a charming volume entitled "Above the Snow Line" (Longmans) in 1885. His contributions to the *Alpine Journal* were numerous.

Mr. Dent was in South Africa in 1899 and 1900 as a Medical Correspondent and Surgeon, and as a result of his experiences he contributed several valuable surgical notes and papers on gunshot wounds, etc., to the medical press. He was a member of the Athenæum, Oxford and Cambridge, Arts, and Burlington Fine Arts Clubs. He will be sorely missed by his many friends at St. George's Hospital.

MR. W. H. BROWN, OF NORTH SHIELDS.

By the death of Mr. William Henry Brown, of Northumberland Square, North Shields, that town has been deprived of one of its most prominent medical practitioners and citizens. The deceased, who was 52 years of age, was a native of Whiteacre, near Beccles, where his father, the Rev. W. H. Brown, was rector of the parish. He was educated at Yarmouth and Beccles Grammar Schools, at the City of London School, and at King's College, Cambridge, where he took his B.A. degree. He became M.R.C.S. and L.S.A. in 1886. He settled in North Shields 23 years ago, and purchased the practice of the late Dr. Bates. Mr. Brown was a devoted Churchman, a licensed lay reader, and a member of the C.E.M.S. Volunteer work appealed to him, and he rose to the rank of Major in the Tyne Submarine Miners, and when that corps was reorganised he transferred to the Royal Army Medical Corps. As a Freemason he held the position of Worshipful Master of the Angus Mark Lodge of Wallsend, a Past Master of St. Oswin's Lodge, North Shields, P.Z. in the Ogle Royal Chapter, North Shields, P.P.G.H. in the Provincial Grand Chapter of Northumberland, and D.C. in the Provincial Grand Lodge of Northumberland

MR. CHARLES EDE, OF BRAMLEY.

The death occurred last week, at Bramley, near Guildford, of Mr. Charles Ede, who was a nonagenarian and a retired Staff Surgeon in the Navy. The deceased, who qualified as M.R.C.S. and L.S.A. in 1844, entered the Navy in 1845, serving on the Pacific station until 1849. He was then appointed Surgeon and Naturalist to H.M.S. *Assistance*, which took part in one of the numerous expeditions in search of Sir John Franklin, who, with Captain Crozier, had set out in May, 1845, for the Arctic region. The *Assistance* found the first trace of the missing expedition at Cape Riley—a boarding pike to which was attached a tin hand pointing in the direction of Beechey Island. Taking that direction, the search party found the first winter quarters of Franklin's party at the back of Beechey Island. There were three graves there, and a good deal of the *débris* of the expedition. At Griffith Island the search party were frozen in. Mr. Ede went with the first sledge party that set out exploring the coast line of Cornwallis Island, where other ships were found. He went westward with a search party to Cape Walker, from which point he had to return to his ship in charge of four frost-bitten men and two who were snow-blind. All the six men recovered.

Upon his return to England, in 1851, Mr. Ede settled down in Bramley, where for more than 55 years he practised as a surgeon.

DR. W. L. HEATH, OF LONDON.

We regret to record the death of Dr. William Lenton Heath, M.D. F.R.C.S., which took place last week at South Kensington, where he had been actively engaged in medical practice for 30 years. The deceased, who studied at St. Bartholomew's Hospital, qualified in 1877, afterwards serving successively as House Physician, House Surgeon, Resident Midwifery Assistant, and Assistant Chloroformist to the hospital. Dr. Heath was a prominent member of many of the medical societies, and he was possessed of a charming personality and a fine presence. Among his contributions to the medical journals was the report of a case of dislocation of the shoulder in a patient 94 years of age. Dr. Heath was 58 years of age.

SPECIAL REPORTS.

INSANITY IN IRELAND.

The annual report of the Inspector of Lunatics is now published, from which we gather that the total number of insane in Ireland on January 1st, 1912, was 12,868 males and 11,787 females, as compared with 12,704 and 11,690 respectively on the corresponding date of last year, showing a total reduction of 261, which, in view of the general increase elsewhere, is reassuring.

The local distribution of insanity being a matter of some interest and importance in connection with its causation, an attempt has been made to arrive at some information on this subject. The returns of the Census of 1911 being not yet fully available, the criterion fixed upon was the number of insane belonging to each county who were resident in public asylums (other than criminal) and workhouses about the beginning of the year under review. The number for the whole of Ireland was 23,174, or 5.3 per 1,000 of the present population; but the distribution is very unequal, varying from 2.6 per 1,000 in Co. Down to 9.2 in Waterford. No less than 21 counties are equal to or above the average, the eight highest being, in order, Waterford, Kilkenny, Westmeath, Monaghan, Clare, Carlow, Meath and Tipperary, while the eight lowest are Down, Derry, Kerry, Fermanagh, Tyrone, Mayo, Antrim and Donegal.

The very large proportion of insane in Co. Waterford is exceedingly difficult to explain, but, upon the whole, it appears that insanity tends to prevail in the agricultural and rural counties, to which category belong the eight which head the list; while, on the other hand, Antrim, containing the greater part of Belfast, is well below the average with 4.7 per 1,000; Down, with the remainder of Belfast, is lowest of all; and Armagh, Tyrone and Derry, with their smaller manufacturing towns, stand near the bottom. As against this, however, Dublin comes about the middle of the list, and Cork and Limerick are high; but the two latter have large agricultural areas to neutralise the effect of the cities, while as regards Dublin, the same tendency which draws vagrants to the capital probably operates to some extent in the case of the insane. The order of the four provinces is—Munster, 6.1 per 1,000; Leinster, 6.0; Connaught, 5.2; and Ulster, 4.2.

It is found that no appreciable connection exists between the distribution of insanity and the density of population, but a considerable degree of correspondence exists in the distribution of poverty and that of insanity. Thus Waterford, with the second highest rate of insane in institutions, has also the second highest rate of pauperism, and all but two of the counties which stand over the average in pauperism were also over the average in insanity. In comparing the emigration and insanity rates, it is found that no marked degree of relationship exists.

Referring to alcohol as a cause of insanity, the report says that the personal equation here comes so much into play that too much importance should not be attached to the figures. With the probabilities in favour of an over-estimate rather than an under-estimate, it is satisfactory to find that the average for the five years 1905-9 for the whole country was only 10.3 per cent. The general conclusion that may be safely drawn from the facts is that alcohol possesses comparatively small importance as a cause of insanity in Ireland.

REVIEWS OF BOOKS.

PREVENTABLE CANCER. (a)

The author holds well-known views that cancer to a large extent may be a disease due to over-feeding, toxic beverages and worry.

More especially, in his opinion, the large consumption of beer, tea, coffee, alcohol, etc., has contributed to the high rate of cancer prevailing in various countries, while countries not using such in excess had little or no cancer.

In the present volume such views are elaborated and supported by a wider investigation; the various food and drink factors are regarded as chronic internal irritants, analogous to irritants which are known to be associated with certain forms of external or skin cancer; while the use of hot foods and drinks far above the body temperature may act in the same way as certain external forms of heat, and thus in part explain the occurrence of cancer in persons who live most temperately.

Similar views have long been entertained by medical observers, and the association of certain forms of superficial cancer with chronic irritation recognised. On the other hand, it is generally held that none of the conditions are the essential, direct or constant cause of the disease, however much they may be subsidiary. The author contends that it is impossible to separate such admitted subsidiary conditions from an essential or direct cause; and "if certain occupations, if certain habits of drinking, if certain diets entail a great excess of cancer, and if certain other bland or plain diets, and avoidance of irritants confer a great freedom from liability, then for practical purposes, to multitudes of people, to the world in general, it does not much matter whether the cause is direct or indirect." The facts, however, that similar conditions produce disease other than cancer, that every individual exposed to the same conditions does not inevitably develop cancer, seem to us to show that such conditions are not essential and that some other primary cause exists. The author's own simile, adduced in favour of combined causes seems to favour a specific cause. He tells us that the position of the question of cancer-causation resembles in one respect that of malaria-causation a few years ago. "All the elements for the discovery of the cause were there. The effect of drainage, season, height above the ground, neighbourhood of pools, and of mosquito nets had been observed. . . . The discovery of the malaria microbe in the mosquito . . . led to a proof of the ætiology beyond question." In the same way there are authorities who favour a parasitic origin of cancer—some causal germ which, though not yet isolated, may be a continuous stimulus to cell growth; others hold to an embryonic origin; or reversion to embryonic type of "soil," with intrinsic power of the cell to multiply—events connected essentially with the "life-cycle."

In neither of such hypotheses are chronic irritation or nutritional factors denied; on the contrary, such influences are admitted.

While not ignoring pathological or clinical considerations, the author bases his conclusions in favour of inappropriate food, drink, and other sources of irritation in the causation of cancer, chiefly, on a large number of statistics collected from various countries and sources. With the qualifications necessary to be borne in mind, as the author states (differences of enumeration, classification, diagnosis, in different countries, age incidence, etc.), the tables are striking. We have read this book with much interest, and recommend it to others as an able and conscientious contribution to a complex and all important subject.

NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

Adlard and Son (London).

Deuxième Congrês de L'Association Internationale D'Urologie. Edited by J. G. Pardoe, F.R.C.S. Pp. 673. Price, 10s. net.

Arnold, Edward. (London).

Internal Secretion and the Ductless Glands. By Swale Vincent, M.D.Lond., D.Sc.Edin., etc., etc., etc., with preface by Prof. E. A. Schäfer, F.R.S. Illustrated. Pp. 464. Price 12s. 6d. net.

The Treatment of Diseases of the Skin. By W. Knowsley Sibley, M.A., M.D., etc., etc., etc. Pp. 280. Price 5s. net.

Baillière, Tindall, and Cox (London)

Medical Laboratory Methods and Tests. By Herbert French,

(a) "Preventable Cancer." By the Hon. Rollo Russell. Pp. 365. Longmans, Green and Co. 1912. Price 4s. 6d. net.

M.A., M.D.Oxon., F.R.C.P.Lond. Third Edition. Illustrated. Pp. 202. Price 5s. net.
Aids to Tropical Hygiene. By Major R. J. Blackham, D.P.H.Lond., R.A.M.C. Pp. 192. Price, cloth, 3s. net; paper, 2s. 6d. net.
Prescribers' Formulary and Index of Pharmacy. By Thomas Pugh Beddoes, M.B., B.C.Camb., F.R.C.S.Eng. Pp. 132. Price 2s. 6d. net.
Medico-Legal Examinations and the Workmen's Compensation Act, 1906. By Sir John Collie, M.D., J.P. Pp. 128. Price 5s. net.
The Treatment of Infantile Paralysis. By Oscar Vulpius, M.D. Translated by Allen H. Todd, M.B., B.S., B.Sc.Lond., with introduction by J. Jackson Clarke, M.B.Lond., F.R.C.S. Illustrated. Pp. 318. Price 10s. 6d. net.
The Clinical Pathology of Syphilis and Parasyphilis and Its Value for Diagnosis and Controlling Treatment. By H. W. Bayly, M.A., M.R.C.S., L.R.C.P. Illustrated. Pp. 194. Price 5s. net.

Black, Adam and Charles, London.
Black's Modern Guide to Harrogate. Edited by Gordon Home. Illustrated. Pp. 128. Price 1s.

Churchill, J. and A. (London).
A Clinical Manual of the Malformations and Congenital Diseases of the Fœtus. By Prof. D. R. Birnbaum. Translated and Annotated by G. Blacker, M.D., B.S., etc., etc. Illustrated. Pp. 379. Price 15s. net.
The Treatment of Ringworm. By J. H. Sequeira, M.D., F.R.C.P., F.R.C.S. Pp. 11. Price 1s. net.
Royal London Ophthalmic Hospital Reports. Edited by William Lang, F.R.C.S.Eng. Vol. 18, Part 3; July, 1912. Price 5s. net.

Chundra, Dr. J. L. (Calcutta).
A Treatise on Treatment. By J. L. Chundra, L.M.S Illustrated. Pp. 684. Price Rs.9.6.

Cornish Bros. (Birmingham).
Insomnia: Its Causes and Treatment. by Sir James Sawyer. Second Edition, with many revisions and additions. Pp. 107. Price

Dunlop Printing Co. (Philadelphia).
Philadelphia General Hospital Reports. Vol. 8, 1910. Edited by David Riesman, M.D. Pp. 375.

Forbes and Co. (Chicago).
Herself: Talks with Women Concerning Themselves. By E. B. Lowry, M.D. Pp. 221. Price 1 dol. net.
Truths: Talks with a Boy Concerning Himself. By E. B. Lowry. Pp. 95 Price 50 cents net.
Confidences: Talks with a Young Girl Concerning Herself. By Dr. E. B. Lowry. Pp. 94. Price 50 cents net.
False Modesty That Protects Vice by Ignorance. By Dr. E. B. Lowry. Pp. 110. Price 50 cents net.

Frowde, Henry, and Hodder and Stoughton (London).
Consumption in General Practice. By H. Hyslop Thomson, M.D., D.P.H. Pp. 235. Price 12s. 6d. net.
X-ray Diagnosis and Treatment. By W. J. S. Bythell, B.A.Cantab., M.D.Vict., and A. E. Barclay, M.D.Cantab., M.R.C.S., L.R.C.P. Pp. 147. Price 15s. net.
Pathology of the Eye. By P. H. Adams, M.A., M.B., etc., etc. Pp. 194. Price 5s. net.

Lewis, H. K. (London).
The Extra Pharmacopœia of Martindale and Westcott. Revised by W. Harrison Martindale, Ph.D., F.C.S., and W. Wynn Westcott, M.B.Lond., D.Ph. Fifteenth Edition. Vol. 1. Pp. 1,114. Price 14s. net. Vol. 2. Pp. 370. Price 7s. net.
Elements of Practical Medicine. By Alfred H Carter, M.D., M.Sc. Tenth Edition. Pp. 683. Price 9s. net.

Livingstone, E. and S. (Edinburgh).
Public Health Law. By William Robertson, M.D.Glas., D.P.H., and Archibald McKendrick, F.R.C.S.Edin., D.P.H Pp. 397. Price 5s. net.

Longmans, Green and Co. (London).
Proceedings of the Royal Society of Medicine. Commemoration Number. Vol. 5. No. 8. June, 1912. Price 7s. 6d. net.

Macmillan and Co., Ltd. (London).
A Text Book of Pathology for Students of Medicine. By George Adami, M.A., M.D., F.R.S., and John McCrae, M.D., M.R.C.P.Lond. Illustrated Pp. 759. Price 25s. net.

Saunders, W. B., Company (Philadelphia).
Collected Papers of the Staff of St. Mary's Hospital. Mayo Clinic, 1911. Illustrated. Pp. 603. Price 24s. net.
The Surgical Clinics of Dr. John B. Murphy. Vol. 1. Part 3. Illustrated. Pp. 170. Price per year of six numbers (one every other month) 35s. net.
Sexual Impotence. By Victor G. Vecki, M.D. Fourth Edition. Enlarged. Pp. 394. Price 10s. 6d. net.
Infant Feeding. By Clifford G. Grulee, A.M., M.D. Illustrated. Pp. 295. Price 13s. net.
Surgical After-Treatment. By L. R. G. Crandon, A.M., M.D., and Albert Ehrenfried, A.B., M.D. Second Edition. Revised and Illustrated. Pp. 831. Price 25s. net.

Sell, C. H. (London).
Low's Handbook to the Charities of London, 1912. Pp. 250. Price 1s.

Shaw and Sons (London).
Symptoms and Their Interpretation. By James Mackenzie, M.D., LL.D. Second Edition. Pp. 301. Price 7s. 6d. net.

Societe D'Editions Scientifiques et Medicales (Paris).
Les Produits Biologiques Médicinaux. By C. Bylu et R. Delauncy. Pp. 466.

Stanley Paul and Co. (London).
The First Signs of Insanity: Their Prevention and Treatment. By Bernard Hollander, M.D. Pp. 347. Price 10s. 6d. net.

Steinkopff, Theodor (Dresden).
Leitfaden Der Praktischen Kreigs-Chirurgie von Dr. Walter von Vettingen. Pp. 377.

Taylor and Francis (London).
Fifth Scientific Report on the Investigations of the Imperial Cancer Research Fund. By Dr. E. F. Bashford. Pp. 94. Price 5s. net.

Wiley and Sons, J. (New York). Chapman and Hall (London).
Enzymes. By Prof Otto Cohnheim. First edition. Pp. 173. Price 6s. 6d. net.
A Laboratory Manual of Inorganic Chemistry. By J. B. Ekeley, Ph.D., Sc.D.; to accompany a text-book of Inorganic Chemistry by C. F. Holleman, Ph.D., F.R.A.Aust. First Edition. Pp. 128. Price 4s. 6d. net.
Manual for Women's Voluntary Aid Detachments. By P. C. Gabbett, M.R.C.S., Lieut-Col. Retired. Pp. 103. Price 1s. net.
Small-Pox and Its Diffusion. By Alexander Collie, M.D., Aberdeen. Pp. 55. Price 2s. net.

Wright, John, and Sons, Ltd. (Bristol).
Statistics of Puerperal Fever and Allied Infectious Diseases. By George Geddes, M.D., C.M.(Aber.). Pp. 119. Price 6s. net.

MEDICAL NEWS IN BRIEF.

The International Federation of Pottery Workers.

The third triennial Congress of the International Federation of Keramic Workers was held at Hanley last week. The main objects of the Federation have been the consideration of problems affecting the workers in the keramic industry, such as hours of labour, occupational disease and its remedies, and the general questions of labour organisation and disputes. The national reports presented to the Congress were chiefly interesting for their references to the ravages of tuberculosis in the potting industry in Germany. It was stated that 50 per cent. of the deaths of pottery operatives were from diseases of the respiratory organs. No special regulations were in force to protect the workpeople. Austria and France reported that nothing was done by legislative bodies to limit the terrible effects of tuberculosis. In France even the existing regulations were not applied. Employers were openly violating them every day, and all protests directed to the public authorities were disregarded.

A Tuberculosis Scheme for Essex.

At a meeting of the Essex County Council, held in London last week, it was decided to appoint three tuberculosis officers for the county, and to spend £4,000 in the provision of dispensaries.

It was also decided to negotiate with the King Edward County Memorial Committee for the taking over of the open-air shelters which they had obtained. It was stated that this was a temporary scheme for immediate operation, and a larger and more comprehensive scheme would be submitted later.

Death of a Surgeon-General.

The death occurred at Cheltenham last week of Surgeon-General Duncan Alexander Campbell Fraser, at the age of 80. He was a son of the late Rev. Hugh Fraser, minister of Ardchattan, Argyllshire. After graduating at Edinburgh he served for nearly 40 years in the Army Medical Service, among his Staff appointments being the medical commands at Netley and Malta. He held the medal for the Ashanti War 1873-4 and the Star of Roumania for services as a Commissioner of the Red Cross Society in the Russo-Turkish War.

Memorial to a Medical Man.

A memorial in the shape of a handsome tablet of Sicilian marble with gilt mosaic border has recently been placed in the main corridor of the Royal Portsmouth Hospital to commemorate the life and work of the late Dr. C. C. Claremont, formerly a member of the Staff, who died on April 11th, 1911.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Dr. T. I. Y.—A high deviation of the nasal septum may cause pain over the bridge of the nose by pressure upon the anterior ethmoidal nerve.

E. S. (Thurloe).—In reply to your inquiry, the only reference we have been able to trace is in a paper by Mr. Arbuthnot Lane in the *British Medical Journal* of May 4th of the present year.

WORKMEN'S COMPENSATION ACT, 1906.

We are asked to insert the following official notice:—"The Home Secretary gives notice that in consequence of the resignation of Dr. P. J. Hay, the appointment of Ophthalmic Specialist Medical Referee under the Workmen's Compensation Act, 1906, for County Court Circuit No. 16 is now vacant. Applications for the post should be addressed to the Private Secretary, Home Office, and should reach him not later than the 25th September."

Mr. P. Cook (Harrow).—Phenolphthalein, the well-known indicator used in volumetric analysis, is largely used as a prompt and safe purgative. It is prepared by the interaction of phenol and phthalic anhydride. The dose is from one-half to ten grains.

Dr. A. L. (Hants).—The subject, we understand, is to be dealt with by several speakers at the forthcoming annual meeting of the American Hospital Association, to be held at Detroit, Michigan, from September 24 to 27.

A NEW SANITARY DUST COLLECTOR.

One of the prominent features of the special anti-tuberculosis exhibition organised by the Society of Medical Officers of Health at 1 Upper Montague Street, Russell Square, is an improved form of dust and refuse collector after the plan adopted at Zurich, and the system exhibited is so designed as to prevent the rubbish being even exposed to the outside air. Each householder has a special tin for the collection of his household rubbish. This is so contrived that it fits into a groove on the cart, and on being slid from the side to the centre pushes aside a trap door in the cart and at the same time automatically removes the bottom of the tin. On sliding the tin back the opening in the cart is again brought into position, and the bottom side of the rubbish tin replaced. The cart is contrived so as to open from below and to deliver its contents either into a rubbish shoot or a destructor.

Dr. Busby.—Nothing that we know of would militate against the adoption of the suggested proposal.

Parson's Green.—In healthy persons antityphoid vaccination is quite harmless.

Appointments.

Adams, A., M.B., B.Ch., M.D., D.P.H., Resident Medical Officer of the Liverpool Sanatorium, Kingswood.

Blease, A. T., M.B., Ch.B., District Medical Officer of the Bucklow Union.

Clarke, T. C., M.B., Resident Assistant Medical Officer of the Crumpsall Workhouse, Manchester.

Jeffrey, John, M.B., B.S.Edin., F.R.C.S., Medical Referee under the Workmen's Compensation Act, 1906, for the Sheriffdom of Berwick, Roxburgh and Selkirk, to be attached more particularly to the County of Roxburgh.

Smith, J. Lorrain, M.D.Edin., to the Chair of Pathology in the University of Edinburgh.

Taylor, J. M., M.B., Ch.B.Glasg., District Medical Officer of the Thorne Union.

West, H. O., M.B., B.S.Lond., Tuberculosis Officer for the County of Kent.

Vacancies.

Beckett Hospital and Dispensary, Barnsley.—Second House Surgeon. Salary £100, with apartments, board and laundry provided. Applications to R. F. Pawsey, Honorary Secretary, 8 Regent Street, Barnsley.

Coton Hill Lunatic Hospital, Stafford.—Assistant Medical Officer. Salary £150 per annum, with residence, board and laundry. Applications to the Medical Superintendent.

The Guest Hospital, Dudley.—Senior Resident Medical Officer. Salary £105 per annum, with board, residence, attendance and washing. Applications to the Secretary.

Asylum for the County Borough of Cardiff (Cardiff City Mental Hospital, Whitchurch), Cardiff.—Second Assistant Medical Officer. Salary £180 per annum, all found. Applications to the Medical Superintendent.

Lewes Victoria Hospital and Dispensary.—Resident Medical Officer. Salary £120 per annum, furnished apartments, board, coal, gas, washing and attendance. Applications to the Hon. Secretary.

Parish of Leicester.—Poor-law Infirmary.—Second Resident Assistant Medical Officer. Salary £130 per annum, with rations, furnished apartments and washing. Applications to Herbert Mansfield, Clerk to the Guardians, Poor-law Offices.

Herts County Asylum, Hill End, St. Albans.—Junior Assistant Medical Officer. Salary £160 a year, with board, lodging and washing. Applications to the Medical Superintendent.

Ingham Infirmary and South Shields and Westoe Dispensary.—Senior House Surgeon. Salary £100 per annum, with residence, board and washing. Applications to John Potter, Secretary.

North Devon Infirmary, Barnstaple.—House Surgeon. Salary £100 per annum, with board, residence and washing. Applications to Chairman, House Committee.

Hants County Asylum.—Third Assistant Medical Officer. Salary £168 per annum, with furnished apartments, board, washing and attendance. Applications to the Visiting Committee, Hants County Asylum, Fareham.

Leicester Royal Infirmary.—House Physician. Salary £100 per annum, with board, lodging and washing. Applications to Harry Johnson, House Governor and Secretary, Board Room.

County and City Asylum, Powick, Worcester.—Junior Assistant Medical Officer. Salary £160 per annum, with board, furnished apartments, washing and attendance. Applications to Medical Superintendent.

Brecon and Radnor Asylum, Talgarth, Breconshire.—Assistant Medical Officer. Salary £170 per annum, with board, furnished apartments, washing and attendance. Applications to the Medical Superintendent.

Births.

Cardew.—On August 26th, at Shire Lane, Chorleywood, Herts, to Violet, wife of Henry J. Cardew, M.A., M.B.Camb.—a son.

Unwin.—On July 17th, at Timaru, New Zealand, to Dr. W. H. and Mrs. Unwin—a son.

Marriages.

Bridger—Aylwin-Foster.—On August 27th, at St. Andrew's Church, Biggleswade, Robert Daniel Bridger, M.R.C.S., L.R.C.P., third son of the late Robert Bridger, of Montevideo, to Dorothy Noel Aylwin, second daughter of the late Rev. Edmund Clement Aylwin-Foster, Rector of Clifton, Beds.

Burney—Rolleston.—On August 20th, at Nun's Cross Church, Captain Walter Henry Skardon Burney, R.A.M.C., son of Walter Burney, Esq., M.D., of Blackheath, to Phœbe Elizabeth, youngest daughter of the late Henry Rolleston, of Glasshouse, King's County.

Hart—Spark.—On August 28th, at St. Clement Danes, Strand, Bernard Hart, M.D., to Mabel Emily, youngest daughter of the late Charles E. Spark and of Mrs. Spark, of Ealing.

Rigden—Gray.—On August 28th, at St. Jude's, South Kensington, Dr. Walter Rigden, of Thurloe Place, to Mrs. John Trew Gray, of 28, Bramham Gardens.

Wilson—Holford.—On August 27th, at St. Clement Danes Church, London, Archibald Wilson, M.D., of Toronto, Canada, to Naomi Eleanor, youngest daughter of Josiah Holford, of Little Comberton, Worcestershire.

Deaths.

Bidwell.—On September 2nd, at 15 Upper Wimpole Street, W., after an operation for appendicitis, Leonard Arthur Bidwell, F.R.C.S., Senior Surgeon to the West London Hospital, aged 47.

Fraser.—On August 28th, at 13 Lypiatt Terrace, Cheltenham, Surgeon-General D. A. Campbell Fraser.

Garlick.—On September 2nd, at Worthing, George Garlick, M.D. Lond., of Gordon Square, Bloomsbury, as the result of an accident.

Heath.—On August 25th, at St. Ann's Heath, William Lenton Heath, M.D., late of 90 Cromwell Road, South Kensington, aged 58.

Wickham.—On August 29th, Charles Thomas Wickham, M.R.C.S., L.S.A., of Sutton Scotney, Hants., late of Winchester, aged 80 years.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

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NOTES AND COMMENTS.

The Origin of Life.

THE Presidential address of the year 1912 seems likely to leave its mark in the annals of the British Association. It was delivered by Professor Schäfer, a distinguished physiologist and member of the medical profession, who turned for his text to that ancient and ever-fascinating problem of the human mind—the origin of life. It cannot be said that he has contributed any fresh facts, or advanced any new theory upon the subject. On the other hand, he has done good service to the world at large by drawing attention to the limitations of our scientific knowledge as regards the jumping-off point—so to speak—of living matter upon the earth. He has also expressed in the terms of clear and lucid statement the latter-day position as regards the relations of the element to the protoplasm that constitutes the formal basis of life. The student commencing the study of biology will do well to follow carefully the words of a master in his discussion of one of the profound mysteries of creation; a task to which he brings the manifold resources of a scholarly, bold, and yet reverent mind. His main propositions are simple. The elements comprising living matter, as we all know, are few in number. Those constantly present are carbon, hydrogen, oxygen, nitrogen and phosphorus; and all active living matter is associated, on an average, with 70 per cent. of water. Certain inorganic salts are also essential to life, such as chloride of sodium, and the salts of calcium, magnesium, potassium, sodium, and iron. All these substances are bound up into a sort of colloidal jelly. In this new form they are enabled to react upon their environment and display that mysterious and evasive quality which we distinguish by the term "life."

The Formal Basis of Life.

THEN comes the second proposition, namely, that the modern chemist has the elements at command in his laboratory, and, step by step, by the aid of synthetical chemistry, is surmounting the frail barrier still left between him and the actual making of protoplasm, as it were, in his test-tube. When he has succeeded in manufacturing the "colloidal jelly" we shall have, at any rate, the elementary machinery of life, but it will still remain to be seen whether this man-made structure will responsively spring into motion. In other words, whether life is merely the expression of chemical reactions between certain definitely compounded substances and the various stimuli of the outside world. That is broadly what Professor Schäfer appears to regard as life. On the other hand, Sir Oliver Lodge defines the visible or tangible reaction itself as "vitality," and that essential quality or power—call it what you will—which connects the two as life itself. In any case, the view that some day or other the material basis of life would be produced by chemical means has been pre-shadowed in the writings of Huxley, Ray Lancaster, Sir Oliver Lodge, and many others.

The Gem of the Address.

FOR all that, Professor Schäfer had much to say that was novel and stimulating with regard to life. At the outset he set aside, as devoid of scientific foundation, the idea of direct supernatural intervention in the creation of life from the original colloidal watery slime, or the ultra-microscopical particles which previously constituted the transitional material between dead and living matter. Obviously it is impossible to obtain evidence of any such frail evolutions from a study of the geological history of the globe. Then came the gem of this philosophical discourse. If in the past living matter has been evolved from that which was lifeless we are justified in holding that a similar evolution is possible, both in the present and in the future. Therein lies the stimulus for research, and it may well set in motion the minds of scientific workers throughout the world. Let the student reflect that the solution of this problem, which has vexed the mind of man ever since his brain cells became capable of dealing with abstract ideas, happily lies at his own elbow in the simplest and least complicated of biological beginnings. Had Dr. Schäfer advanced no other proposition, that alone would have stamped his address with distinction.

Death.

WHAT should be the source of that human life which recapitulates the experiences of untold ages of evolution? The answer is that, normally, man should die of old age, by a painless cessation of the sum-total of the activities that have been crystallised into his span of life. That man should die of old age, and of that alone, is, and always has been, the practical working assumption of medical science. Apart from accidents, which must happen in the human as in all other families, each of us individually should be entitled, in any well-governed community, to look forward to a hale and ripe old age well over a century of years, followed by gradual and well nigh imperceptible extinction. Not many years ago a stout old Bristol centenarian was cleaning his own windows and walking five to ten miles a day. Medical science, by teaching the rules of health and securing a good environment, does its best to bring a like possibility within the reach of all of us. Many distinguished men have attempted to find the secret of long life. Metchnikoff, arguing from the longevity of certain hill-dwelling natives, who consumed much sour milk, devised the lactic acid theory with a *lacto-bacillus* as the *elixir vitæ,* but he himself has since abandoned this view, so we gather, in favour of a bacillus inhabiting the lower intestine of the dog. Unfortunately, the dog itself is a short-lived animal, but that fact does not necessarily mean that it may not act as host to Metchnikoff's long-sought micro-organism.

The Dawn of the Health Age.

Clearly the labours of medicine have always been intended to shield mankind from the multitudinous diseases with which Nature has seen fit to encompass his path. The crudest efforts of the savage medicine man are simply blind gropings in this direction. Even nowadays, when medicine is making rapid strides towards the secure foothold of an exact science, much of the work of actual practice is based on purely empirical grounds, and the best men in the profession are forced to trust to a balance of probabilities where as yet there is no chart to justify his pilotage. Happily the region of the unknown is being rapidly reduced day by day. Within the experience of the present generation the cause and the cure of syphilis have been surrendered into our hands; the marvellous achievements of modern surgery, rendered possible by the genius of Lister, have been multiplied in all directions; the causation of yellow fever, sleeping sickness, Malta fever, malaria, influenza, and many other diseases, has been identified; preventive and curative serum-therapy has been laid upon a secure foundation; the life-expectation of the individual citizen has been materially raised; and in many other ways medical science has been winning all along the line. There is much to be done, however, before civilised existence is brought to such perfection that the average man may expect to live to a hundred years or more. Meanwhile, one thing is particularly clear, namely, that the mortality is greater among the industrial than among the better-to-do classes. That fact has furnished the text for a vigorous onslaught by Professor B. Moore on existing systems of medical treatment in a book entitled "The Dawn of the Health Age."

Contract and Voluntary Practice.

Anyone acquainted with the conditions of modern Poor-law and voluntary hospital practice must agree with much that is said by Professor Moore. In Poor-law infirmaries the medical and nursing staff are often inadequate, there is a lack of skilled surgery, and there are other obvious administrative and statutory shortcomings. Poor-law outdoor relief is for the most part inadequate, perfunctory and worthless. Something of the same kind may be said with regard to out-patient treatment in the voluntary hospitals. It is physically impossible for justice to be done to the crowds of patients, either in the way of diagnosis or of treatment. Club practice is in a still worse condition. The friendly societies have driven a hard bargain with the doctors, whose remuneration has been cut down to a bare subsistence level, in spite of a grievous amount of overwork thrust upon the medical officers. The result is hurried, superficial and unsatisfactory medical attendance. One main argument advanced by Dr. Moore is that under present systems the sick man is not adequately treated at the beginning of his illness, a neglect that later saddles the nation with a vast burden of crippled and unproductive workers. His remedy is a public medical service under the control of our own profession. There is much to be said in favour of the scheme, which, indeed, may prove within the next few months the only rock of refuge in our refusal to work the National Insurance Act upon the terms set forth in the Statute Book.

The Insurance Act.

There can be little doubt that in the long run the National Insurance Act will yield yeoman's service in the cause of health. Not only will men, women and children be tended in the early days of sickness, but the family will be assured of subsistence money when working members are thrown out of employment. From the standpoint of health, it is of value to maintain a fairly good standard of nutrition in the healthy as well as to treat or attempt to patch up the sick—especially when that attempt is made by the makeshift and that piecemeal organisation, the regulation of which has been pulverised by Dr. Moore. Then the Act furnishes for the first time a comprehensive national scheme for dealing with consumption. Lastly, it provides substantial help for the mothers of the nation. In all these ways the Act may be welcomed as a fit herald of the dawn of the health age. Had the Government arranged terms with the medical profession before instead of after the passage of the Act, there would probably have been no hitch in the administration of medical benefits. Mr. Lloyd George, however, appears to have leant on a broken reed in the shape of the advice of certain medical politicians of the Council of the British Medical Association. The latter executive body has been pretty sharply rapped over the knuckles, and can now fairly claim to be representative of the profession generally. Whatever views the medical man may hold individually, we hold it to be his bounden duty to support the Association policy in the present crisis. Students may be advised at the outset of their career to consider well the necessity of subordinating self to the common interest of a noble, but so far somewhat unbusinesslike and opinionated, profession.

A Medical Man's Hobbies.

Though it can never be said of medicine that its practice is monotonous, for few callings present so many opportunities for work of ever-changing interest, yet there is an imperative need for every practitioner to get out of the daily professional groove and to vary the currents of his thoughts. Now and then it has happened that these "lesser things of life" have gradually monopolised the whole of a man's activities to the ultimate exclusion and forsaking of his original life-work. This, of course, is rare, and when instances come to our notice of medical men leaving their profession to take up some other occupation it is but natural to conclude that many of these are really cases of mistaken vocation. An ideal hobby should consist of some occupation absolutely unconnected with the routine duties of life, for anything beyond this becomes simply an additional vocation. Whether it be some form of outdoor recreation or sport, such as fishing, golf, or motoring, or an indoor pursuit, such as literature or one of the fine arts, he who so indulges should remember he is out for amusement and relaxation rather than for hard work. The reproach is sometimes cast at medical men, and especially at medical students, that they either talk "shop" or sport. This is true, to a great extent, and, unless carried to excess, is nothing to be ashamed of, but a greater widening of a medical man's sympathies in as many directions as possible is much to be desired in the interests of their patients.

Other Accomplishments.

The value of an intimate knowledge of one or more foreign languages soon becomes apparent to the medical student. Not only will he be at a great disadvantage when interviewing foreign patients if he cannot converse with them in their own tongue, but he will speedily find out that he is debarred from learning at first-hand the latest medical achievements recorded in the various Continental journals. It is much better to be able to go straight to the source of information rather than depend upon translated abstracts, some of which may be considerably belated. A working knowledge of French or German, preferably both, is of great assistance to all who desire to be *au courant* with the latest medical and scientific work of the day. Another useful accomplishment for the medical man is a knowledge of shorthand. He may have to take down a dying deposition, where it is important that a *verbatim* report should be made, or he may wish to take the fullest possible notes of some medical lecture or address. Medical phonography is an art well worth learning and cultivating, for it is likely to be useful in all sorts of circumstances and emergencies, as, for instance, when giving medical evidence in the witness box, when original notes may be consulted.

Nurses and Natives.

From time to time agitation springs up in one or other of the Colonies to put an end to the nursing of natives by white women. Quite recently in the Cape Provincial Council an amendment to the Hospital Ordinances was proposed, which would have put a stop to the practice of employing white nurses in native wards. It is curious that all agitations of this kind arise outside hospital circles, and that neither of the classes—medical men and nurses—best qualified to have an opinion on the matter, have joined therein. The truth is that the abuses which are alleged to be so likely to arise, do not exist. As a matter of fact, it is found in mixed hospitals that, as a rule, nurses prefer the coloured to the white wards. They find that it is easier to maintain discipline among natives, and that the latter are more tractable and less exacting. There is, let us add, a positive objection, from the ethical point of view to depriving our coloured fellow-subjects of the help of white nurses in their illness. To forbid the nursing of natives by white women would be to hand them over to some inferior body of attendants. It is our duty, as a profession, in our care of our patient to give him the best attendance in our power, to cure him, if we can, *cito, tuto et jucunde*. In the absence of any grave reason for such action, and those qualified to judge declare that there is no such reason, we are not justified in substituting an inferior for the present system in our colonial hospitals.

The Motor Car Danger.

In our last issue we discussed the nuisance and danger of motor car traffic in town and country. It was pointed out that the key to nine-tenths of the nuisance was to be found in excessive speed, especially in the case of the heavy motor omnibus, which is by far the worst offender in our towns. Cut down speed to a reasonable limit and at one stroke the risks to life and limb of wayfarers, the intolerable noise and dust, the rumbling earthquakes that disturb our peace and dilapidate our dwellings would be reduced to vanishing point. In other words, the risks and the annoyance due to automobile traction are for the most part preventable, and as a commonsense Anglo-Saxon community we must look first to local authorities and police to prevent them, failing which happy result we must turn to Parliament for relief. The police have shown a commendable wish to cope with the evil in London. Their action has apparently been due to the terrible toll in life and limb exacted from Londoners by the owners and drivers of motor vehicles. They have issued a caution that in future any chauffeur involved in an accident runs a risk of losing his licence. We commend to the Commissioners of the Metropolitan Police and to provincial chief constables the desirability of keeping, year by year, a map studded with pins, the heads of which denote by one colour fatal and by another non-fatal accidents. That would indicate infallibly the danger-points, and would enable the police to bring their observation to a focus. In all traffic there must be an unavoidable margin of fatalities, but nothing can justify the running down of a wayfarer by the driver of an automatically-driven machine anxious to cover the ground at an unreasonable rate of speed.

PERSONAL.

H.M. the King has been pleased, on the recommendation of the Secretary for Scotland, to approve the appointment of Dr. Robert Gordon McKerron, M.A., M.D., to be Professor of Midwifery in the University of Aberdeen in the place of Professor Wm. Stephenson, who has resigned.

Dr. R. G. Waddy has been appointed Inspector of Ophthalmic Hospitals in the Egyptian Medical Service.

Dr. H. Hyslop Thomson, M.D.Glasg., has been appointed Medical Officer under the King Edward VII. Welsh National Memorial Scheme.

Miss Jane Walker, M.D., will deliver the introductory address at the London School of Medicine for Women on October 1st, on "Common Sense."

Dr. H. D. Rolleston will deliver the introductory address at the University of Manchester on October 1st, on "Universities and Medical Education."

Mr. George B. Pemberton, F.R.C.S.Edin., M.B., Ch.B.Edin., has been appointed Medical Officer of Health of the district of Disley, Cheshire, with Hayfield.

Dr. Henry Priestley, of the Lister Institute of Preventive Medicine, has been appointed Second Assistant at the newly formed Australian Institute of Tropical Medicine.

Dr. R. W. A. Salmond, M.D., Ch.M., D.P.H., has been appointed Medical Officer in Charge of the Electrical Department at the Queen's Hospital for Children, Bethnal Green, E.

Dr. Dossaibi R. Patell, the first Indian lady to obtain the M.D.Lond. and the diploma of the Conjoint Board, was entertained at dinner the other day at the Holborn Restaurant by Parsee residents in London.

In consequence of the death of the Vice-Chancellor of the Birmingham University (Ald. C. G. Beale, M.A.) it has been decided, as a mark of respect, to abandon the usual October Conversazione to inaugurate the opening of the Medical Winter Session.

EDUCATIONAL SUMMARY FOR 1912-13.

INTRODUCTORY REMARKS.

THE following remarks are addressed mainly to students of medicine, whether *in posse* or *in esse*, but they may be perhaps of some interest also to the friends of those desirous of joining the ranks of the profession. Of all the learned professions that of medicine emphatically has the best claim to be called liberal and progressive. Those who aspire to live worthily in the discharge of its high duties must bring to the task a mind carefully trained and capable in various branches of intellectual activity. The best men in the profession are those of the widest culture who are able to bring to their work minds richly stored with the fruits of human energy garnered from many an extra-professional field. Ever since serious attention has been paid to the necessity of a carefully planned curriculum of medical education the possession of a sound preliminary education of a general nature has been recognised. Of late years the tendency has been to include in the preliminary examination subjects that would be of direct use to the student in his later career in the schools. It would be difficult to imagine a better training for a young man than that required in mastering the elements, say, of botany, zoology, and chemistry. At the outset of our remarks it has seemed natural to dwell upon the intellectual side of the career of medicine, for in that will be found a solace for the trials and difficulties that must be faced in that as in all other walks of life. From the monetary point of view, it is open to all men of ordinary gifts and application to secure a competency, although he may have at first to go through a more or less extended period of years spent in the weary task of waiting for practice. It is well to point out that under present conditions few may hope for the prizes that are met with in general, in consulting, in special, and, in some cases, in the army, navy, and civil services. Minor titles—that is to say, knighthoods and baronetcies—are not conferred upon private practitioners, but are distributed to a moderate extent among the consultant, specialist, and official branches of the medical profession. The honour of a peerage was conferred upon the late Lord Lister, one of the greatest men who ever adorned the ranks of medicine, and one who has conferred upon mankind lasting and universal benefits. The student could not obtain a higher ideal of the humility and the genius of the true scientist than that afforded by a study of the life-work of Lister, nor could he find a more striking example of the vast field of possibilities that lies before the conscientious worker. At any moment the earnest student of medicine, be he legally qualified or not, may be the discoverer of some fact that may materially contribute to the progress of medicine and to the benefit of mankind. The majority of the medical practitioners, however, must needs be content with the sense of duty well and faithfully performed, without hope of wealth or social distinction. So far as private practice is concerned, the medical world is at present plunged in a state of doubt and difficulty. The passing of the National Insurance Act has disturbed their old relations with club and contract practice, and has brought into that category a vast number of patients who formerly paid small fees for medical attendance. The terms offered by Government for administering medical benefits under the Act have been rejected by the medical profession as a whole. The upshot of the dispute it is at present impossible to forecast with any great amount of confidence. Should the Government accede to demands that appear to us not unreasonable, the position of the medical man who takes that kind of practice may be materially strengthened. There is one point, however, on which the student and the newly-qualified practitioner may be warned. Should the just demands of the profession be rejected it has again and again asserted in newspapers claiming to be officially informed that a large number of young medical men will be attracted by the income offered for insurance posts. It is to be hoped devoutly that the younger practitioners will not stultify the action of their elders by any such act of disloyalty. For the first time in history the medical profession has been brought together and has adopted a common action by the unanimous decision of a vast majority of its members. There are, unhappily, a few practitioners who do not see eye to eye with the majority in these matters, and it is to these men that Mr. Lloyd George and his colleagues will have to look for doctors willing to work the Act. We refuse to believe that any considerable number of the junior members of the profession will be so careless of the deliberate decision of their elders, or so short-sighted as to accept the posts in question. It is well that these things should be clearly understood by those who contemplate joining the ranks of a brotherhood which, if not rich in this world's goods, can never lose the distinction attached to an intellectual profession whose work forms part of the warp and the weft of human life. It is not too much to say that many of the happiest amenities of mankind's existence are due to the advances of scientific medicine, which has lengthened the average span of years and mitigated alike the horrors of war and the far more destructive evils inherent in the civil struggle for existence. What, indeed, can be thought of a science that has practically stamped small-pox, cholera, typhus fever, and plague from the face of the United Kingdom? What of the genius of our countrymen who have introduced chloroform and vaccination and aseptic surgery? What of the overflowing enthusiasm of the scientific workers ready to investigate any condition, from that of the humblest bacterial invasion of some denizen of a slum alley, to a deadly disease of the tropics, or elsewhere North, South, East or West of our great Imperial dominions?

From an early period of his studies, the student will do well to devote some attention to the wider aspects of professional work, for the real business of his life begins after the days of his probation. There are many ways in which the position of the medical practitioner might be greatly improved. Nor is it going too far to say that most of them would be attainable were a proper representative body created to protect the interests of the profession. One of the early questions that the student would do well to bear in mind is the relation the General Medical Council and the Medical Corporation he has joined will have towards his future career. Will they leave him in absolute neglect from the day of his final qualification, or will they do anything to help him on in the professional struggle? For some reason or other the profession is in the unstable position allotted in sacred writ to the house divided against itself. Instead of a single-portal entrance to the profession, as in law, we have a score or more of conflicting corporations. Indeed, the spirit of rivalry, and of individual as apart from collective action, seems to be so deeply rooted as to render the outlook for future consolidation somewhat discouraging. Yet the signs of the times do not point all in one direction. The British Medical Association, in spite of various defects and errors, has shown that great things are possible to a great profession with a common object in view. The success of many other purely professional organisations, moreover, points the moral of the tale sufficiently well to show that the road to professional paradise lies through the gate of co-operative union. Lastly, there is the recent opposition to the National Insurance Bill.

Choice of a School.

Manifold influences combine to make for the choice of a school. Tradition, family influence, proximity, means, and acquaintance with other students or members of the staff all come into play, and there are few who are not affected by them. The would-be student, however, who has the whole collegiate domain open to him and his selection unhampered by any consideration than that of merit, has the choice of nearly twenty centres at which to follow his bent. There is a natural tendency for a man to look to his immediate vicinity for the maturing of his genius, and in these days, when Universities are cropping up with bewildering prolixity, most students will probably find one within fifty or sixty miles of their homes. As the medical curriculum is laid down carefully by the General Medical Council, there is not much variation in that of the individual schools, and a good all-round education can be relied on in practically every one. On the other hand, some have teachers of established ability and reputation, whilst others are seeking to obtain that enviable notoriety, and while some men may be attracted by the spirit of adventure to cast in their lot with the new and struggling, others will prefer the security of well-trodden paths. The object of this number of The Medical Press and Circular is to present impartially the claims and attractions of all schools, and if parents and their wards study its pages carefully they will, we feel sure, be convinced that there are none that have not their own special charms. The outlay on actual necessary educational expenses does not differ materially in different places, the higher cost of certain centres being chiefly due to the greater cost of living. It is obvious that in London, for instance, where rents are high, the cost of lodgings must be considerably more than in many smaller and less favourite towns, while, on the contrary, a student living in his parents' home in London will not be so much expense to them if he goes to a London Hospital as if he takes up his abode at a northern University. But, other things being equal, it is important for the average student to choose that school at which he is most likely in after years to obtain a resident post.

Choice of a Qualification.

One day, in the not very distant future, we hope, the choice of what qualification to study for will not present so great a difficulty as it does to-day. Owing to the haphazard way in which British institutions and customs grow up, there have come into being a number of rival interests, both pecuniary and scholastic, which it is difficult to break down, with the result that students are offered all sorts of qualifying diplomas, conferring on them the right to append almost every conceivable alphabetical combination to their names. It may be laid down in general terms that the shortest and least picturesque of these designations will generally be found the most serviceable, both from the expenditure of time that it will save in signing certificates, and in the greatest ease by which it will be understanded of the people. Happily, or unhappily, a qualification even of the highest order has, as a rule, but small relation to success in practice, and many practitioners of light and leading will be found to have laid the foundations of their success on a more solid basis than that of academical triumph.

Course of Study.

Although there are certain individual variations, the course of study pursued at all the medical schools is pretty much the same. One or two of the Universities are a little exacting in the number of special subjects they pile on to the crouching backs of their alumni, but in course of time it is generally found that the other centres of instruction follow their lead. Still, it is well to remember that from the moment the student pays his fee to the dean, the disposition of each moment of his time for the next five years is laid down with procrustean exactness, and that any diversion in the shape of amusement, illness, or failure in examination connotes a corresponding addition to the length of his pupilage.

The Ultimate Future.

Once qualified, a medical man can therefrom consult his predilections in some degree as to where he will practise his profession, though he will probably find the choice somewhat narrowed by the pecuniary resources at his disposal and the meagre opportunities offered for enterprise in the vicinity of popular, established practitioners. If he be averse from the struggle for existence in the troubled waters of private practice, he may turn to the comparative haven of competency afforded by the services. The Army, Navy, Indian, Colonial, and West African appointments may tempt him abroad, or the Poor-law infirmaries, lunatic asylums, public health officerships, or fever hospitals may prevail on him to remain at home. In all the official Government services there is a career with graduated promotion, and certain pension, whilst in the local services at home promotion is very uncertain, the pay, except in a few instances, very poor, and a pension either not provided or calculated on a studiously thrifty basis. One of the special advantages of medicine is that its votaries are nearly always sufficiently in request to be able to pick up a living as long as health lasts, and when old age comes on the practitioner will find that a parental Government is willing to pay him 5s. a week to the end of his days.

Summary.

There are two types of men which find in medicine the most satisfying career. One is he who has a strong affinity for nature and natural phenomena. To such the profession of healing offers numberless opportunities for applying their peculiar powers, and gives much entertainment by the elusiveness of its secrets. The other class of man which finds satisfaction in the practice of medicine is he who regards the welfare of others before his own comfort and convenience. These rare beings, less rare probably in the medical profession than in any other, make devoted practitioners among the poor, and do not account their labour wasted if their patient gets well, but cannot afford through stress of illness to pay the bill. The man who does not get on well at medicine is he who wishes to account for all his services on a cash basis, and to make his practice a purely business concern. As a matter of fact, it is not possible to translate personal services into an exact money equivalent, and much unpleasantness pursues the path of him who tries to do so. The best that many men hope for is that a reasonable number of honest and grateful people will be found so far to appreciate his services that he is relieved of financial strain for the next half-year.

Medicine, then, is the means to an end, and that end is the amelioration of man's lot on earth, and not the aggregation of wealth. As the first it is a brilliant success; as the latter, it is a sorry business.

THE ENGLISH UNIVERSITIES.

The English Universities are ten in number—*viz.*, Oxford, Cambridge, London, Manchester, Durham, Liverpool, Leeds, Sheffield, Birmingham and Bristol, beside the University of Wales. The choice of a University is usually determined by social, geographical, and financial considerations. Students whose parents are able and willing to incur the necessary expense will do well to select one of the ancient Universities, since their degrees confer upon their holders a status not accorded by the public to the degrees of more modern institutions. To those less favoured by fortune, but blessed with energy and a fair share of intelligence, the London University offers ample scope, and its degrees are recognised as the outward and visible sign of high professional attainments. A capable and industrious student, however, may equally well lay the foundations of success in one of the newer provincial Universities.

UNIVERSITY OF OXFORD.

There are two degrees in Medicine, B.M. and D.M., two in Surgery, B.Ch. and M.Ch., and two diplomas, Public Health and Ophthalmology.

Graduates in Arts (B.A. or M.A.) are alone eligible, except for the Diploma Examinations. To obtain the B.M. and B.Ch. the following examinations must be passed:—1. Preliminary Mechanics and Physics, Chemistry, Animal Morphology, and Botany. 2. Professional. *(a)* First Examination: (1) Organic Chemistry, (2) Human Anatomy. *(b)* Second Examination: Subjects—(1) Medicine, Surgery, Midwifery, (2) Pathology, (3) Forensic Medicine with Hygiene and (4) Materia Medica with Pharmacy.

The First Examination for B.M. and B.Ch. may be passed as soon as the Preliminary Scientific Examinations have been completed. The subjects may be presented separately or in any combination or in any order, provided Anatomy and Physiology be passed together.

The Second Examination may be passed after the completion of the first, but Pathology and Hygiene may be taken before or with the remaining subjects. Before admission candidates must present certificates of attendance on a laboratory course in Practical Pathology and Bacteriology and of having acted postmortem clerk for three months, surgical dresser for six months, and clinical clerk for six months. Also they must produce certificates of instruction in Infectious and Mental Diseases, and of attendance on Labours, and of proficiency in the practice of Vaccination and the administration of Anæsthetics. Also in respect of the First Examination candidates must present certificates showing that they have dissected the whole body once and have attended courses of laboratory instruction in Practical Histology and Practical Physiology.

The degree of D.M. is granted to Bachelors of Medicine of the University provided they have entered their thirty-ninth term and have composed on some medical subject a dissertation which is approved by the professors in the Faculty of Medicine and examiners whose subject is dealt with. A book published within two years of the candidate's application for the degree may be substituted for a dissertation. The degree of M.Ch. is granted to Bachelors of Surgery of the University who have entered their twenty-seventh term.

Diploma in Ophthalmology.—There is an examination once in each year in the Theory and Practice of Ophthalmology for the purpose of granting certificates of proficiency therein, styled Diplomas in Ophthalmology. The examination is under the supervision of the Board of the Faculty of Medicine, which has power to make regulations as to the subjects of the examination, the time at which the examination is held, and the conditions of admission. No candidate is admitted to the examination for the diploma who has not pursued at Oxford a course of study in Ophthalmology approved by the Board of the Faculty of Medicine, and extended over a period of at least two months.

Travelling Fellowship, Scholarships, and Prizes.—A Radcliffe Travelling Fellowship is awarded annually after an examination held in February. It is tenable for three years and is of the annual value of £200. Application should be made to the Radcliffe Examiners, Radcliffe Library, University Museum. A Rolleston Memorial Prize is awarded once in two years to members of the Universities of Oxford and Cambridge of not more than ten years' standing and who have passed all the Exams. for the degree of B.M. or B.A. for an original research in some Biological subject, including Physiology or Pathology. The Radcliffe Prize, founded by University College (1907), is of the value of £50 and is awarded biennally for research in some branch of medical science. The Theodore Williams Scholarships of the value of £50 each are awarded annually in the subjects of Anatomy, Physiology and Pathology.

Detailed information may be obtained from the University Calendar.

UNIVERSITY OF CAMBRIDGE.

At the University of Cambridge five years of medical study are required for the M.B. and B.C. degrees. The candidate must have resided nine terms (three years) in the University, and have passed the "previous" examination in classics and mathematics. There are three examinations: The first in (1) chemistry, (2) physics, and (3) biology; the second in (1) human anatomy and physiology, and (2) elementary pharmacology including pharmaceutical chemistry and the elements of general pathology; and the third in (1) surgery and midwifery, and (2) principles and practice of physics, pathology and pharmacology. The first examination is divided into three parts, and the second and third examinations each into two parts, which can be taken separately. Subsequently to the third examination an Act has to be kept which consists in reading an original thesis, followed by an oral examination on the subject of the thesis. As the subjects for the examination for the degree in surgery are included in the third examination for the M.B. degree, candidates are admitted to the degree of Bachelor of Surgery on passing the third examination for Bachelor of Medicine.

New regulations for the Degrees of Bachelor of Medicine and Doctor of Medicine have recently been passed. Students who have not passed the 2nd M.B. Examination under the old regulations before December 31st, 1910, *must proceed with their course under the New Regulations. Those who have passed the 2nd M.B. under the Old Regulations before December 31st,* 1910, *may proceed under either the old or the new Regulations. No examination under the old Regulations will be held after December,* 1913. *Copies of the New Regulations may be obtained on application to the Assistant Registrar.*

The M.D. degree may be taken three years after the M.B. An Act has to be kept, including the presentation of an original thesis, with oral examinations and an essay to be written extempore. There is also the degree of Master of Surgery, for which the candidate, having already passed for B.C., or being M.A, has otherwise qualified in surgery, has to pursue extra study in surgery, and has a special examination or submits original contributions of merit to the science or art of surgery. The yearly expenditure of a student who keeps his term by a residence in a college is from £150 to £200 a year. This, however, may include all payments to the University and the College—all fees as well as clothes, pocket money, travelling expenses, &c. Non-collegiate students have only to pay the University fees, which are not large. They lodge and board as they like; their expenses, therefore, are entirely in their own hands.

The University grants a diploma in public health without the necessity of residence, the examination being in so much of State Medicine as is comprised in the functions of officers of health, and subject to the latest requirements of the General Medical Council. These examinations are held in Cambridge the first week in April and October. Candidates, whose names must be on the "Medical Register" of the United Kingdom, and need not be members of the University, should send in their applications to the Secretary of the State Medicine Syndicate a fortnight in advance. Every candidate who has passed both parts of the examination to the satisfaction of the examiners will receive a University Diploma testifying to his competent knowledge of the subjects comprised in the duties of a medical officer of health.

There is also a special examination in Tropical Medicine and Hygiene, held annually twice, in January and in August. It is open to qualified practitioners under certain conditions as to previous study and experience. Successful candidates receive a University Diploma.

An abstract of all Regulations may be obtained upon sending a stamped directed envelope to the Assistant Registrary, Cambridge. Full information is contained in the University Calendar.

UNIVERSITY OF LONDON.

The University of London became in 1900 a teaching as well as an examining body. The medical degrees awarded are those of M.D., M.S., and M.B., B.S., the two latter being now given together as a graduating degree. The medical degrees are granted to both internal and external students, the former being students of the constituent schools and colleges of the University.

The Matriculation Examination.—Students, before being admitted to the University, must either (1) have passed the Matriculation or the School Examination, or (2) have been exempted therefrom under Statute 116 of the University which recognises certain other examinations in its lieu. The examinations for matriculation take place three times in each year—in September, in January, and in June. Fee £2. If he withdraws before the last day of entry it will be returned to him. If he fails to present himself he will be allowed to enter for a subsequent Matriculation, within eight months, on payment of £1. If he retires after the commencement of the examination, or fails to pass it, the full fee of £2 is payable on every re-entry.

Provincial Examinations for Matriculation.—These are appointed by the Senate upon the application of any city, institution, or college desiring to be named as a local centre, and are carried on simultaneously with the examinations in London. Candidates must give notice upon their forms of entry to the Principal of the University, who will then make all necessary arrangements. Besides the University fee, a fee, usually varying from £1 to £3, is charged by the local authorities, and must be paid at the local centre immediately before the several examinations.

Faculty of Medicine.—The Faculty of Medicine grants the joint degrees of M.B., B.S. (Bachelor of Medicine and Surgery), and the higher separate degrees of M.D. (Doctor of Medicine) and M.S. (Master of Surgery). The curriculum for the medical degrees covers five and a half years, except in the case of students who have passed the Preliminary Scientific Examination or the First Examination for Medical Degrees, before July, 1910, and the examinations formerly known as the Preliminary Scientific, the Intermediate, and the Final Examination in Medicine are now respectively entitled the First, Second, and Third Examinations for Medical Degrees.

The First Examination of Medical Degrees (*Inorganic Chemistry, Physics, and General Biology*) takes place twice in each year, commencing on the Monday following December 10th, and on the second Monday in July. The fee is £5 for each entry to the whole examination, provided that all the subjects are taken at one time. When less than the whole examination is taken at one time, it is £2 for each subject. Candidates must, at their first entry, present themselves in all three subjects; if failing in one subject only, they may, with permission, present themselves for re-examination in that subject on payment of the proper fee.

The Second Examination for Medical Degrees (*Part I.*): *Organic Chemistry.*—This examination takes place twice in each year. No candidate will be admitted to this examination within six months of having passed the First Examination. The fee is £2 for the first and every subsequent entry. The examination will consist of a paper and practical work, and may include oral questions in Organic Chemistry, which is "to be treated in an elementary manner, and with special regard to its applications in physiology, pharmacology, and pathology."

The Second Examination for Medical Degrees (*Part II.*) takes place twice in every year, commencing in 1911 on the second Monday in March, and on the first Monday in July. The subjects of the examination are Human Anatomy and Embryology, Physiology, and Pharmacology, including Pharmacy and Materia Medica. No candidate shall be admitted to the examination unless he has passed the First Examination for Medical Degrees at least 18 months previously, and has passed Part I. of the Second Examination for Medical Degrees. The fee for each entry to the whole examination is £8. For re-examination in one subject it is £4.

M.B., B.S. Examination.—The M.B., B.S. examination takes place twice in each year, commencing on the fourth Monday in October and on the first Monday in May. Candidates will be examined in Medicine (including Therapeutics and Mental Diseases), Pathology, Forensic Medicine and Hygiene, Surgery, Midwifery, and Diseases of Women. The subjects may be divided into two groups, namely: (1) Medicine, Pathology, Forensic Medicine, and Hygiene; and (2) Surgery, Midwifery, and Diseases of Women. These groups may be taken either separately or together. The fee is £10 for each entry to the whole examination, and £5 for examination or re-examination in either group. There will be no separate examination held for Honours, but the list of candidates who have passed will be published in two parts, namely, an Honours list and a Pass list. Bachelors of Medicine of this University who graduated in or before May, 1904, may obtain the B.S. degree by passing the Surgical part of the M.B., B.S. examination.

Doctor of Medicine.—The examination for this degree takes place twice in each year, commencing on the first Monday in December and on the first Monday in July. Candidates must have taken the degrees of M.B., B.S. not less than two years previously, but for those who have taken the M.B., B.S. degrees with honours, or have done certain original work, this period of delay may be reduced to one year. Candidates who have obtained their M.B. degrees in or before May, 1904, will not be required to hold the degree of B.S. before seeking the doctorate. They may present themselves for examination in one of the following branches, namely: (1) Medicine; (2) Pathology; (3) Mental Diseases; (4) Midwifery and Diseases of Women; (5) State Medicine; and (6) Tropical Medicine. Any candidate for the degree of M.D. may transmit to the Registrar, not less than two months before the commencement of the examination, a thesis or published work having definite relation to the branch of Medicine in which he is a candidate, and if the thesis be approved by the examiners, the candidate may be exempted from the written examination in that subject. The fee is £20, and for re-examination £10.

Master in Surgery.—The examination takes place twice in each year, and commences on the first Mondays in December and July. Candidates must produce certificates of having taken the degrees of M.B. and B.S. not less than two years previously (with certain exceptions, as in the examination for the M.D.) and of having subsequently held for at least six months a resident or non-resident Surgical hospital appointment. The fee is £20, and for re-examination £10.

Full details can be obtained free on application to the Academic Registrar, University of London, South Kensington, S.W. Students should apply direct to the University for this detailed information.

University of London, University College.—Faculty of Medical Sciences.—The Faculty of Medical Sciences comprises Physics, Chemistry, Botany and Zoology, also the Departments of Anatomy, Physiology, and Pharmacology (the Intermediate Medical Sciences), and the Departments of Hygiene and Public Health, of Pathological Chemistry, and of Experimental Neurology (Post-graduate) Study). Full Preliminary and Intermediate Courses of study are provided for students desirous of obtaining the medical degrees of the University of London and as well as for students seeking the qualifications of other Universities and licensing bodies. University and King's Colleges have been constituted University Centres for the teaching of the Medical Sciences. A student can enter the College directly, and at the end of the first and second courses select the Medical School and Hospital.

Scholarships and Exhibitions.—Five annual University Entrance Exhibitions of £40 a year, six similar scholarships of £50 a year each in science subjects are annually awarded, and three Andrews' Entrance Scholarships. The Bucknill Scholarship of 135 guineas and two Exhibitions of 55 guineas are awarded on the results of an examination held in July. The Cluff Memorial Prize, value £15, is awarded for proficiency in Anatomy, Physiology, and Chemistry; the Schäfer Prize in Physiology, value £18, for proficiency in Physiology; the Sharpey Physiological Scholarship, value £150, for Research in Physiology.

Composition Fees.—Course for the first Medical Examination, 26 guineas; course for the second Medical Examination, 58 guineas; course for the first Examination of the Conjoint Board, 21 guineas; course for the second Examination of the Conjoint Board, 58 guineas.

The London Medical Schools recognised by the University with the title of "University of London," are:—University College, King's College, St. Bartholomew's Hospital Medical School, St. Thomas's Hospital Medical School, Westminster Hospital Medical School, Guy's Hospital Medical School, London Hospital Medical College, Middlesex Hospital Medical School, Charing Cross Hospital Medical School, St. Mary's Hospital Medical School, Royal Army Medical College, London School of Tropical Medicine, School of Medicine for Women, and the Lister Institute of Preventive Medicine.

University of London—King's College, London, Strand.—In the medical division of the Faculty of Science students are prepared for their first examination (Chemistry, Physics, Biology), and for their second examination (Anatomy, Physiology, and Pharmacology), by the University Professors attached to King's College, London, and their assistants. At present four medical schools, viz., those attached to King's College Hospital, Westminster Hospital, St. George's Hospital, and Charing Cross Hospital, the teaching in which is restricted to the subjects of the final examinations, send their students to King's College for the purpose of tuition in the above-mentioned preliminary and intermediate studies. Full particulars as to courses of study, laboratory accommodation, hours, fees, etc., can be obtained on application to the Dean, Professor Halliburton, or the Secretary, Mr. Walter Smith, at the College.

UNIVERSITY OF DURHAM.

Two diplomas, one Licence and six degrees in Medicine and Hygiene are conferred—*viz.*, the degrees of Bachelor of Medicine, Bachelor of Surgery, Master of Surgery, Doctor in Medicine, Bachelor of Hygiene, and Doctor of Hygiene, Diploma in Public Health and Diploma in Psychiatry and the Licence in Dental Surgery. These degrees, diplomas and licence are open to both men and women.

For the degree of Bachelor of Medicine (M.B.), there are four professional examinations. The subjects are: Elementary anatomy, biology, chemistry, and physics. For the second: Anatomy and physiology. For the third: Materia medica and pharmacy, pathology and elementary bacteriology, medical jurisprudence and public health; and for the fourth: Medicine, clinical medicine and psychological medicine, surgery and clinical surgery, midwifery, and diseases of women and children, and clinical gynæcology.

It is required that one of the five years of professional education shall be spent in attendance at the University College of Medicine and the Royal Victoria Infirmary, Newcastle-upon-Tyne. First and second year students (dating from registration) are not required to comply with the regulation regarding attendance on hospital practice. Candidates who have passed the First and Second Examinations of the University will be exempt from the First and Second Examinations of the Conjoint Board.

For the degree of Bachelor of Surgery (B.S.) every candidate must have passed the examination for the degree of Bachelor of Medicine of the University of Durham, and must have attended one course of lectures on operative surgery, and one course on regional anatomy. Candidates will be required to perform operations on the dead body, and to give proof of practical knowledge of the use of surgical instruments and appliances.

For the degree of Master of Surgery (M.S.) candidates must not be less than twenty-four years of age, and must satisfy the University as to their knowledge of Greek or German. In case they shall not have passed in either of these subjects at the Matriculation Examination for the M.B. degree, they must present themselves at Durham for examination in it at one of the ordinary examinations held for this purpose before they can proceed to the higher degree of M.S. They must also have obtained the degree of Bachelor of Surgery of the University of Durham, and must have been engaged for at least two years subsequently to the date of acquirement of the degree of Bachelor of Surgery in attendance on the practice of a recognised hospital, or in the naval or military services, or in medical or surgical practice.

For the degree of Doctor of Medicine (M.D.) candidates must be not less than twenty-four years of age, and must satisfy the University as to their knowledge of Greek or German. In case they shall not have passed in either of these subjects at the Matriculation Examination for the M.B. degree, they must present themselves at Durham for examination in it at one of the ordinary examinations held for this purpose before they proceed to the higher degree of M.D. They must also have obtained the degree of Bachelor of Medicine of the University of Durham, and must have been engaged for at least two years, subsequently to the date of acquirement of the degree of Bachelor of Medicine, in attendance on the practice of a recognised hospital or in the naval or military services, or in medical or surgical practice.

Each candidate must present an essay which has been prepared entirely by himself (and typewritten), based on original research or observation, on some medical subject selected by himself, and approved by the Professor of Medicine, and must pass an examination thereon, and must be prepared to answer questions on the other subjects of his curriculum, so far as they are related to the subjects of the essay.

Candidates for any of the above degrees must give at least twenty-eight days' notice to the Secretary of the College of Medicine, Newcastle-on-Tyne. In the case of the M.D. (Essay) Examination, candidates must send in their essays six weeks before the date of the examination.

A new wing has been added to the College of Medicine to accommodate the departments of physiology and bacteriology. It also contains students' union rooms and gymnasium.

The New Royal Victoria Infirmary, containing 400 beds, was opened by the late King, in July, 1906. In the new infirmary adequate accommodation is provided for the study of the various special subjects, in addition to the ordinary clinical work. Practical midwifery can be studied at the Newcastle Maternity Hospital. Opportunities for practical study are also afforded by the Dispensary, City Infectious Diseases Hospital, Eye Infirmary, and at the Northumberland County Lunatic Asylum.

There are various appointments open to students, whilst the scholarships available are numerous and of considerable value.

Fees.—(*a*) A composition ticket for lectures at the college may be obtained—1. By payment of 72 guineas on entrance. 2. By payment of 46 guineas at the commencement of the first sessional year and 36 guineas at the commencement of the second sessional year. 3. By three annual instalments of 36, 31, and 20 guineas, respectively, at the commencement of the sessional year. A Composition Ticket for the course of lectures and practical work of the first two years of the curriculum may be obtained by the payment of 40 guineas on entrance. (*b*) Single courses of lectures, five guineas. (*c*) Fees for attendance on hospital practice: For three months' medical and hospital practice, six guineas; for six months, ten guineas; one year, fifteen guineas; composition fee in one payment, thirty-five guineas; or by two instalments—*viz.*, first year, twenty guineas; second year, eighteen guineas. In addition, two guineas yearly up to three years must be paid to the Committee of the Royal Infirmary. (*d*) Composition fee for lectures, &c., at the College for the Licence in Dental Surgery, 34 guineas. Composition fee for dental practical work at Newcastle Dental Hospital, 35 guineas.

A Licence in Dental Surgery has been instituted. Before admission to the Final Examination, each candidate must furnish evidence, (1) of having attained the age of 21 years, (2) of having undergone a three-years' pupilage in mechanical dentistry with a registered dentist, and (3) of having been engaged in professional study for at least four years subsequent to registration as a dental student. He must also sign such declaration as the University may determine, binding himself not to advertise for professional purposes. Examinations are held concurrently with the medical examinations, and the fees payable by candidates amount to £15.

The Senate of the University has decided to grant a Diploma in Psychiatry, full particulars of which may be obtained from the College Calendar.

Further particulars will be given on application to Prof. Howden, Secretary, University of Durham College of Medicine, Newcastle-on-Tyne.

MANCHESTER UNIVERSITY.

Candidates for degrees in medicine and surgery (M.B., Ch.B., M.D., Ch.M.) must attend classes in the University during at least two years, and for three years must pursue a course of medical study at any college or medical school recognised by the University.

They are required to have passed the Matriculation Examination, or such other examination as may from time to time be recognised for this purpose by the University. The Matriculation Examination is held in July and in September.

Before admission to the Degrees of Bachelor of Medicine and Surgery candidates are required to send in the usual certificates of age and study as at the other Universities. All candidates for these Degrees must have attended approved courses of both lectures and laboratory work, and must pass four examinations.

The final examination cannot be taken before the fifth year of medical study. The subjects of examination are as follows: 1, Medicine, systematic and clinical, including mental diseases and diseases of children; 2, Surgery, systematic, clinical, and practical; 3, Obstetrics and diseases of women; 4, Forensic medicine and toxicology.

The regulations relating to the M.D. and Ch.M. Degrees can be obtained on application to the Registrar.

The first M.B and Ch.B. is held in March, July, September, and December. The second examination is held in December, and in March; the third examination in March, July and December; the Final in July and December; the examination for Ch.M. in July only.

Fees.—Matriculation examination, £2, subsequent examination in the same year, 30s. First examination, £5; for any subsequent examination, £2. The fees for the Second Examination and for the Third and Final Examinations are the same as for the First Examination. A fee of £10 is payable on the conferring of the degree of M.D., a fee of £5 on the conferring of the degree of Ch.M.

The buildings include large laboratories, dissecting-rooms, library and reading-rooms, and are on the most modern principles. Students wishing to engage in anatomical, physiological, or pathological research will find excellent opportunity for study in the complete and well-furnished laboratories. Hospital practice is taken out at the Royal Infirmary, which contains 592 beds. The Cheadle Lunatic Asylum, St. Mary's Hospitals, the Southern Hospital, and other special hospitals also afford teaching facilities of great importance.

The numerous appointments are of considerable monetary value. The principal are:—The Leech fellowship of £100; Honorary Research Fellowships; Junior Research Fellowships in Public Health, two of the value of £50, each annually; Entrance scholarships in medicine, £100 (towards University and Infirmary fees); Ashby Memorial Research Scholarship in Diseases of Children, £100, awarded triennially; Dreschfeld Memorial Scholarship £30, awarded annually; Turner Medical scholarship of £20 to students who have completed a course of medical study in the University; Robert Platt physiological scholarship of the value of £50; Robert Platt zoological and botanical scholarship, £50; Professor Tom Jones memorial surgical scholarship of £100, awarded triennially; two Dauntesey medical scholarships, one of £45 and one of £35; John Henry Agnew scholarship in diseases of children, value £30, awarded annually; Graduate scholarship in medicine, £25, awarded annually; and many prizes. Robert Platt Exhibitions in Physiology, £15, awarded annually; Robert Platt Biological Exhibitions, £15, awarded annually; Sidney Renshaw Exhibitions in Physiology, £15, awarded annually; Professor Tom Jones Exhibition in Anatomy, £25, awarded annually.

Fees.—For courses of instruction for the degrees of M.B., and Ch.B., of the University:—For the first M.B. examination the total cost amounts to about 30 guineas payable on entry. A composition fee of 70 guineas, payable in three instalments of 30, 20, and 20 guineas, at the commencement of the second, third, and fourth years of studentship respectively, admits to the courses of instruction required for the degrees of M.B. and Ch.B.

Dental Fees.—The composition fee for candidates for the University degree of Bachelor of Dental Surgery is 60 guineas, and for candidates for the University diploma in Dentistry is 55 guineas, payable in two equal instalments at the beginning of the first and third years of studentship.

UNIVERSITY OF BIRMINGHAM.

The University of Birmingham grants Degrees of M.B., Ch.B., M.D., Ch.M., and also a B.Sc. in the subject of Public Health. As a rule, in order to obtain any of these Degrees it is necessary that a student shall have passed at least the first four years of his curriculum in attendance upon the classes of the University, but the Senate has power of recognising attendance at another University as part of the attendance qualifying for these degrees.

Degrees of Bachelor of Medicine and Bachelor of Surgery.—The student must have passed either the Matriculation Examination of the University or one of the following examinations, which will be accepted in lieu thereof for the present:—(*a*) The previous examination of the University of Cambridge; (*b*) Responsions of the University of Oxford; (*c*) The matriculation examination of any recognised University; (*d*) The leaving certificate (higher) of the Oxford and Cambridge Boards; (*e*) The Oxford or Cambridge senior local examination.

Matriculation Examinations are held in July and September each year.

Degrees of Doctor of Medicine and Master of Surgery.—At the end of one year from the date of having passed the Final M.B., Ch.B. Examination, the candidate will be eligible to present himself for the higher Degrees of either Doctor of Medicine or Master of Surgery or both, the regulations for which may be had upon application to the Dean. The University also grants a Degree and a Diploma in Public Health, and provides adequate instructions for the same.

Dental Department.—The University grants the Degrees of Bachelor and Master of Dental Surgery (B.D.S. and M.D.S.), and a Diploma in Dental Surgery

(L.D.S.). The whole of the instruction for which may be taken out in the University, with which is associated the Birmingham Dental Hospital.

The General and Queen's Hospitals.—The practices of these hospitals are amalgamated for the purpose of clinical instruction under the direction of the University Clinical Board, by whom all schedules will be signed and all examinations conducted. The hospitals have a total of upwards of 500 beds. 8,000 in-patients and 80,000 out-patients are treated annually, and many valuable posts are open to students at both.

Further information can be obtained from Professor Peter Thompson, Dean of the Medical Faculty.

THE UNIVERSITY OF LIVERPOOL.

The Degrees in the Faculty of Medicine are Bachelor of Medicine and Bachelor of Surgery (M.B. and Ch.B.), Doctor of Medicine (M.D.), Master of Surgery (Ch.M.), and Master of Hygiene (M.H.). The course of study for the Degrees of Bachelor of Medicine and Bachelor of Surgery is of five years' duration, and of this period two years must be spent at the University, the remaining three years can be taken in any medical school approved by the University.

For the Degree of M.D., a thesis is required which may be presented not earlier than one year after graduation, as M.B., Ch.B.

The degree of Ch.M. is given after a period of at least one year of further study after graduation as M.B., Ch.B., on the results of an examination.

The degree of M.H. is given after two years' study and examinations, and includes the D.P.H.

Diplomas.—Diplomas have been instituted in Public Health (D.P.H.), Ophthalmic Surgery (D.Ch.O), Tropical Medicine (D.T.M.), and Veterinary Hygiene (D.V.H.). Special diplomas are also granted in Anatomy, Bacteriology, Bio-chemistry, and Parasitology after a course of study of three terms in the subject chosen and allied subjects.

Students may enter for the degrees of the University of Liverpool, or may study for the degrees, diplomas and qualifications of the other licensing bodies.

Hospitals.—The Clinical School of the University consists of four general hospitals—the Royal Infirmary, the David Lewis Northern Hospital, the Royal Southern Hospital, and the Stanley Hospital; and of five special hospitals—the Eye and Ear Infirmary, the Hospital for Women, the Infirmary for Children, St. Paul's Eye Hospital, and St. George's Hospital for Skin Diseases. These hospitals contain in all a total of 1,127 beds. The organisation of these hospitals to form one teaching institution provides the medical student and the medical practitioner with an unrivalled field for clinical education and study, and all are within easy access from the University. The period of hospital practice extends over the last three years of medical study. There are a large number of appointments to House Physicianships and Surgeonships both at the general and special hospitals, which are open to qualified students of the School. These appointments (20) in most cases carry salaries varying from £60 to £100 per annum.

Fellowships and Scholarships.—Fellowships, Scholarships, and Prizes of over £1,000 are awarded annually. A Holt Fellowship in Pathology, of the value of £100 for one year, is awarded annually by the Medical Faculty to a senior student possessing a medical qualification. A Holt Fellowship in Physiology, awarded under similar conditions, also of the value of £100 for one year. A Robert Gee Fellowship in Anatomy, awarded under similar conditions, of the value of £100 for one year. An Alexander Fellowship for Research in Pathology, of the annual value of £100, renewable. A Johnston Colonial Fellowship in Pathology and Bacteriology (£100 a year, renewable). A John W. Garrett International Fellowship in Physiology and Pathology (£100 a year, renewable). An Ethel Boyce Fellowship in Gynæcological Pathology (£100 a year, renewable). A Thelwall Thomas Fellowship (£100 a year, renewable) in Surgical Pathology. Two Lyon Jones scholarships, of the value of £21 each for two years, are awarded annually—a Junior Scholarship, open at the end of the first year of study to Liverpool University students in the subjects of the first M.B. Examinations, and a Senior Scholarship, open to all students in the school at the end of the second or third year of study, in the subjects of Anatomy, Physiology, Materia Medica, and Pharmacology. A University Scholarship of £25 awarded on the results of the second examination for the degree. The Derby Exhibition of £15 for one year is awarded in Clinical Medicine and Surgery in alternate years. Students may compete in their fourth and fifth years. A Clinical School Exhibition of £15 awarded under similar conditions. The Torr Gold Medal in Anatomy, the George Holt Medal in Physiology, the Kanthack Medal in Pathology, and the Robert Gee Book Prize, of the value of £5, for Children's Diseases.

Entrance Scholarships.—Two Robert Gee Entrance Scholarships, of the annual value each of £25 for two years, are offered annually for competition. The holder is required to take out the First M.B. Course for the University Degree in Medicine.

The University also grants a Diploma in Dental Surgery (L.D.S.) and Degrees in Dental Surgery (B.D.S. and M.D.S.). The courses of systematic instruction are given in the University buildings, five minutes walk from the Dental Hospital.

Communications should be addressed to the Dean, Mr. K. W. Monsarrat, F.R.C.S., the University, Liverpool.

LIVERPOOL SCHOOL OF TROPICAL MEDICINE.

The Diploma of Tropical Medicine, University of Liverpool.—The school is affiliated with the University of Liverpool and the Royal Southern Hospital of Liverpool. The instruction given occupies six hours a day for five days a week during thirteen weeks. Each Course consists (1) of a systematic series of lectures on tropical medicine and sanitation delivered by the Professor of Tropical Medicine at the University; (2) of additional lectures on special African and other diseases delivered at the University; (3) of systematic lectures and demonstrations on tropical pathology, parasitology and bacteriology by the Walter Myers Lecturer, at the University; (4) of similar instruction on medical entomology by the Lecturer on Economic Entomology at the University; (5) of clinical lectures and demonstrations delivered at the Royal Southern Hospital by the Physician in charge of the Tropical Ward, the Professor, and the Walter Myers Lecturer; and of lectures or demonstrations by assistant teachers.

In December and April an examination is held by the University for its Diploma of Tropical Medicine (D.T.M.), which is open only to those who have been through the course of instruction of the school. The examination lasts three days, and consists (1) of papers on tropical medicine, tropical pathology, and tropical sanitation and entomology respectively; (2) of a clinical examination; and (3) of an oral examination.

The fee for the full course of instruction is thirteen guineas, with an extra charge of ten shillings and sixpence for the use of a microscope, if required. The fee for the examination is five guineas. Applications should be made to the Dean of the Medical Faculty, University of Liverpool, from whom prospectuses may be obtained.

Two University Fellowships of £100 a year each are open to students of the school, amongst others. Accommodation for Research work is to be had, both at the University laboratory of the school, and at its Research Laboratories at Runcorn (sixteen miles distant from Liverpool).

Since it was instituted ten years ago the school has employed thirty different investigators paid out of its funds, and has despatched to the tropics twenty-one scientific expeditions, many of the workers having been taken from among its students. The work done by them has been published in twenty-one special memoirs with many plates and figures, besides text books and numerous articles in the scientific press. From the beginning of 1907, however, the Memoirs have been succeeded by the Annals of Tropical Medicine and Parasitology, published by the Committee, and open to outside contributors. (Apply to the Secretary, B10, Exchange Buildings, Liverpool). The Mary Kingsley Medal is awarded by the School for distinguished work in connection with tropical medicine, and has been given to Colonel Bruce, Professor Koch, Dr. Laveran, Sir Patrick Manson, Lord Lister, Professor Looss, Professor Danielewsky, Dr. Charles Finlay, Mr. W. M. Haffkine, Professor Golgi, Colonel Gorgas, Professor Theobald Smith, and Rt. Hon. Joseph Chamberlain, M.P., and others.

UNIVERSITY OF BRISTOL.

THE University grants the conjoined degrees in the Faculty of Medicine of M.B., Ch.B., the degree of Doctor of Medicine (M.D.), Master of Surgery (Ch.M.), Bachelor of Dental Surgery (B.D.S.), and Master of Dental Surgery (M.D.S.); also diplomas in Public Health (D.P.H.), in Dental Surgery (L.D.S.), and in Veterinary State Medicine (D.V.S.M.).

The conjoined Degrees of M.B., Ch.B.—The curriculum occupies five years and a half. The University lectures and laboratory courses are attended in the large and well equipped new wing of the University. Hospital practice and Clinical instruction are provided in the allied hospitals, which together afford upwards of six hundred beds and a very large external midwifery department. Three years at least must be spent in the University, and two of them subsequently to passing the second examination.

Degree of B.D.S.—The curriculum occupies five years. Mechanical Dentistry may be studied in the new and well equipped University Laboratory under the supervision of a skilled mechanic. In this laboratory the whole of the mechanical work for both the Bristol Royal Infirmary and the Bristol General Hospital is done by the pupils. Lectures and ordinary laboratory work are attended in the University, the Metallurgical laboratory is in the Chemical department, and has been specially fitted for the purpose. Prosthetic and operative work are done in the Bristol Royal Infirmary and the Bristol General Hospital, and special Dental House Surgeons have been appointed to amplify the instruction given by the staff.

Diploma in Dental Surgery, L.D.S.—The curriculum occupies four years, and runs on very similar lines to that for the B.D.S. It is not, however, necessary to pass the matriculation examination, and some subjects required for the degree are omitted. Candidates for either the B.D.S. or L.D.S. must be registered Dental students.

Diploma in Public Health.—The necessary laboratory work is done in the University in the Chemical and Pathological departments. The remainder of the curriculum is taken under the Medical Officer of Health for the City and County of Bristol (Lecturer in Public Health) and the Assistant Medical Officer for the Port of Bristol (Demonstrator in Public Health).

N.B.—*Although the various courses are primarily designed for the University degrees and diplomas, equal attention is paid and equal facilities are offered to students who enter for the degrees of other Universities, such as the University of London, and for the diplomas of the various examining bodies.*

Women are admitted to all degrees and diplomas, and to the courses of study necessary for them. The University Hall of Residence is situated at Clifton, within a short distance of the University. Particulars of residence may be obtained from Miss M. C. Staveley, M.A., at the University.

Inclusive Fees.—For the M.B., Ch.B. curriculum, 140 guineas; for the B.D.S. curriculum (including mechanical pupilage), 190 guineas; for the B.D.S. curriculum (excluding mechanical pupilage), 115 guineas; for the L.D.S. curriculum (including mechanical pupilage), 168 guineas; for the L.D.S. curriculum (excluding mechanical pupilage), 93 guineas; for the D.P.H., 27 guineas. Arrangements can be made for paying these fees by instalments. Further information can be had from the Dean of the Faculty (Professor E. Fawcett) or from the Registrar of the University.

Appointments (Undergraduate).—Clinical Clerkships, Dresserships, also Ophthalmic, Obstetric, and Pathological Clerkships are tenable at the Bristol Royal Infirmary and the Bristol General Hospital. In these institutions the Dressers reside in rotation free of charge.

Appointments (Post-Graduate).—At the Bristol Royal Infirmary:—Two House Surgeons, £100 each per annum; two House Physicians, £100; Resident Obstetric and Ophthalmic House Surgeon, £75; Throat, Nose, and Ear House Surgeon, £75; Casualty Officer, £50; Dental House Surgeon, £100. All these appointments are made for twelve months, except that of Casualty Officer, which is for six months. From the resident officers a Senior Resident Officer is appointed at an additional salary of £30. At the Bristol General Hospital:—Senior House Surgeon, £150 per annum; Casualty House Surgeon, £100 per annum if another resident appointment has been previously held; two House Physicians, £80; House Surgeon, £80; Dental House Surgeon, £200 per annum. All these appointments are for six months, except that of Dental House Surgeon, which is for two years.

The Winter Session opens on October 1st.

UNIVERSITY OF LEEDS.

The school of medicine attached to this recently incorporated University, was originally founded eighty years ago as the Leeds Medical School. The building, erected on a site contiguous to the infirmary, and opened fourteen years since, contains one of the finest dissecting-rooms in the United Kingdom, extensive laboratories for physiology and pathology with the most recent improvements in fittings and apparatus, ample lecture-room accommodation, a large library, and separate museums for pathology and anatomy. Professors and lecturers are attached, and the clinical teaching is given by the physicians and surgeons attached to the Leeds General Infirmary, one of the largest in the United Kingdom, having 524 beds, with a staff of physicians and surgeons of considerable eminence. Ophthalmic demonstrations and demonstrations of skin diseases are given in the infirmary by surgeons in each department, where also are obtainable various clinical clerkships, dresserships, and other appointments; and an extern maternity charity is attached, at which the necessary attendance at labours can be taken, Besides the infirmary there is a large dispensary, a large hospital for infectious diseases, a hospital for women and children, and a maternity hospital, all of which are open to students of the school.

Scholarships, Prizes, &c.—(1) An entrance scholarship of £73 2s. 6d. There is also a Hardwick prize in clinical medicine, a McGill prize in clinical surgery, each of the value of £10, Thorp scholarship of about £25 a year in forensic medicine and hygiene, and a Scattergood prize of £5 in midwifery, besides silver and gold medals and other class prizes. The composition fee for attendance upon all the required courses of school lectures is £73 2s. 6d. for University students who have attended the preliminary scientific courses, and the same for non-University students, exclusive of chemistry and biology.

The composition fee for medical and surgical practice and clinical lectures is £42 in one sum, or two instalments of £22 each. These fees are not included in the composition fees for lectures and are payable separately.

A scholarship of £42 to cover the cost of medical and surgical practice is offered annually by the University.

Degrees and Diploma in Dental Surgery are obtainable at this University, being Bachelor of Dental Surgery (B.Ch.D.), and Master of Dental Surgery (M.Ch.D.). Candidates for the degree of Bachelor of Dental Surgery are required to have passed the Matriculation Examination, to have pursued thereafter approved courses of study for not less than five academic years, two of such years at least having been passed in the University subsequently to the date of passing Parts I. and II. of the first examination, and to have completed such period of pupilage or hospital attendance, or both, as may be prescribed by the Regulations of the University. No candidate shall be admitted to the degree who has not attained the age of twenty-one years on the day of graduation.

Candidates for the diploma in Dental Surgery are required to present certificates showing that they have attained the age of twenty-one years, that they have attended courses of instruction, approved by the University, extending over not less than four years, two of which must be spent in the University, and that they have completed a pupilage of three years, two of such years at least having been taken before the First Professional examination. Candidates are required to satisfy the Examiners in the several subjects of the following examinations: A preliminary examination in Arts; a Preliminary examination in Science; the First Professional examination; and the Final examination.

A Diploma in Public Health (D.P.H.) is granted after examination under the usual regulations, also a Diploma in Psychological Medicine.

UNIVERSITY OF SHEFFIELD.

By the Charter granted in 1905, this University is permitted to grant degrees in medicine. All its courses and all its degrees are open, without restriction, to both sexes. The new buildings of the University, opened by his late Majesty King Edward in 1905, are situated at the west end of the city, overlooking on two sides the adjoining Weston Park. The medical department occupies the entire north wing of the University quadrangle, and is within easy reach of the various hospitals, with which it is connected for clinical purposes.

These are as follows:—The Royal Infirmary contains 320 beds, with an annual average number of over 3,800 in-patients, over 11,500 out-patients, and over 23,000 casualties; the Royal Hospital, with 190 beds, and an annual number of over 3,000 in-patients, over 20,000 out-patients, and nearly 20,000 casualties; the Jessop Hospital for Diseases of Women, with 80 beds, about 750 in-patients, and over 3,000 out-patients; also a Maternity Department, with about 450 in-patients per annum, and about 700 out-patient cases attended. Special courses on fevers are held at the City Fever Hospitals (570 beds), and on Mental Diseases at the South Yorkshire Asylum (1,610 beds).

Clinical Practice.—The practices of the Royal Infirmary and Royal Hospital are amalgamated for the purpose of clinical instruction, giving a total of 510 beds for the treatment of medical, surgical and special cases.

Appointments.—The following are open to all students who have passed their examinations in anatomy and physiology:—Casualty Dresserships, Surgical Dresserships, Medical Clerkships, Pathological Clerkships, Ophthalmic Clerkships, Clerk to the Skin Department, etc.

Fees.—Composition fee of £80, payable in three instalments, viz.:—£24 at commencement of first year of study; £28 at commencement of second year of study; £28 at commencement of third year of study. This composition fee entitles the student to attendance on all the courses of lectures and practical classes, except pharmacy, vaccination, and instruction in anæsthetics required for a degree course in the University, or for the ordinary qualifications in medicine and surgery of the examining boards.

Composition Fee for Medical, Surgical, Gynæcological and Obstetrical Hospital Practice.—Fee for the full period of hospital practice required by the examining boards:—If paid in one sum at commencement of hospital practice, £42; or if paid in two sums of 21 guineas and 20 guineas, one on beginning hospital practice, the other twelve months later, £43 1s.

Dental Department.—In connection with the University there is a complete dental department, which is fully recognised by the various examining bodies, and students are able to get their full curriculum here.

Scholarships and Fellowships.—Entrance Medical Scholarship of the approximate value of £122, open to both sexes, awarded in June each year. Four Town Trustees' Scholarships, value £50, tenable for three years. Town Trustees' Fellowship, value £75, open to graduates of the University, tenable for one year. Mechanics' Institute Scholarship, value £50, tenable for one year, and renewable for a second year. The Frederick Clifford Scholarship, value about £50 per annum, tenable for two years, open to graduates of the University; and the Kaye Scholarship, value about £22 10s. A Gold Medal is offered annually for the best student in clinical medicine and clinical surgery. A Bronze Medal is awarded annually to the student who has gained first place in the examination for the full course in each year.

Degrees.—Candidates for a medical degree must have matriculated in the University or have passed such other examination as may be recognised for this purpose by the University and sanctioned by the Joint Matriculation Board. The subjects required by the General Medical Council must be included in the matriculation examination, or its recognised substitute. The degrees in medicine obtainable are Bachelor of Medicine and Bachelor of Surgery (M.B., Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.); conditions and particulars of which may be obtained on application to the Dean.

At the University of Sheffield post-graduate courses are held annually. These courses are specially arranged for practitioners, and the work done is mainly clinical and practical.

A Diploma in Public Health is also granted by the University.

UNIVERSITY OF WALES.

The School of Medicine, in University College, Cardiff, which is one of the constituent colleges of the University of Wales, has since its foundation, in 1883, prepared students for the Preliminary Scientific Examination of the University of London, and for the corresponding examinations of other licensing bodies. Chairs of Anatomy, Physiology and Pathology and Bacteriology and Lectureships in Materia Medica and Pharmacy and Histology and Embryology have been established, making it possible for students of medicine to spend three out of the five years of prescribed study at Cardiff. Arrangements with the managing committee of King Edward VII.'s Hospital, Cardiff, give students of the College the privilege of attending this large and well-ordered hospital, which is situated within five minutes' walk of University College. Many students, especially from Wales and Monmouthshire, avail themselves of the opportunities thus afforded to pursue the earlier part of the medical curriculum near home. All classes are open alike to both men and women students over sixteen years of age. The courses of instruction given at Cardiff are recognised as qualifying for the examinations of the Universities, Royal colleges, and other licensing bodies of Great Britain and Ireland. Having spent at least three years in study at Cardiff, and having passed the examinations in these years, a student may proceed to London or elsewhere and complete his qualifying course for a University degree or for a college diploma.

Students preparing for the first and second examinations of the Conjoint Board for England, or for the corresponding examinations of the Conjoint Board for Scotland, may compound for their classes by paying a single composition fee of £41 10s., or by paying £20 and £24 10s. at the beginning of their first and second years respectively. Those preparing for the First and the Second Examinations for Medical Degrees of the University of London may compound for their three years' instruction at Cardiff by paying a single composition fee of £63, or by paying £20, £28 and £21 at the beginning of their first, second and third years respectively.

In 1899 a department of Public Health was established, and lecturers in bacteriology and in public health and hygiene were appointed. Medical men preparing for the diploma in Public Health and Hygiene of the University of Wales can attend complete courses of lectures and laboratory instruction in this department. These courses are also recognised by the University of Cambridge, by the Royal Colleges of Physicians and Surgeons, by Victoria University, and other Examining Boards.

In the case of medical students, attendance on the class of hygiene and public health is accepted by the Universities of London and Cambridge, and by the Conjoint Examining Board of England

Courses of lectures to midwives, adapted to the requirements of the Central Midwives Board, under the Midwives Act, are commenced in October, January, and April. The lectures are suitable both for pupil midwives and practising midwives, as well as for nurses who desire to enter for the examination for certification under the Act.

Scholarships and Free Studentships.—The attention of students about to matriculate is drawn to the entrance scholarships and Free Studentships which are offered at the college for competition in April, most of which may be held by medical students. Full particulars of the examination for these may be obtained from the Registrar, or from the Dean of the Medical Faculty.

THE ENGLISH COLLEGES.

The medical corporations in England are the Royal College of Physicians of London, the Royal College of Surgeons of England, and the Society of Apothecaries of London. The two Royal Colleges now co-operate to hold a series of examinations, on passing which the candidate receives the diploma of Licentiate of the Royal College of Physicians (L.R.C.P.), and Member of the Royal College of Surgeons (M.R.C.S.). The Society of Apothecaries grants a complete diploma (L.S.A.) in medicine, surgery, and midwifery.

Conjoint Examining Board in England.

Candidates for the above licences are required to complete five years of professional study at recognised medical schools and hospitals, after passing the preliminary examination, of which six months may be spent at an institution recognised by the Board, to comply with the following regulations and to pass the examinations hereinafter set forth.

Professional Examinations.—There are three examinations, each being partly written, partly oral, and partly practical. These examinations are held in the months of January, April, July, and October, unless otherwise appointed, fourteen clear days' notice before the day on which the examination commences being required, the candidate transmitting at the same time the required certificates. The subjects of the first professional examination are Part I., Chemistry; Part II., Physics; Part III., Elementary Biology; and Part IV., Practical Pharmacy. Candidates may present themselves immediately after passing the preliminary examination in general education, provided they are able to produce the certificates required. They must present themselves for examination in Parts I. and II. together, until they have reached the required standard to pass in both or in one of these parts, but they will not be allowed to pass in one part unless they obtain at the same time at least half the number of marks required to pass in the other part. Candidates may take Parts III. and IV. separately, or they may present themselves for the whole examination at one time. Practical Pharmacy may be taken with, or at any time before Part I. of the Final Examination. Candidates who shall produce satisfactory evidence of having passed an examination for a degree in medicine in any of the subjects of this examination conducted at a University in the United Kingdom, India, or in a British Colony, will be exempt from examination in those subjects in which they have passed.

The fee for admission to the first examination is as follows:—For the whole examination, £10 10s.; for re-examination after rejection in Parts I. and II., £3 3s.; and for re-examination in each of the other parts, £2 2s.

The subjects of the second examination are anatomy and physiology. Candidates will be required to pass in both subjects at one and the same time. The study of anatomy and physiology will not be recognised until candidates have passed in two of the first three parts of the first examination. Candidates will be admissible to the second examination fifteen months from the date of passing the required subjects of the first examination.

Candidates referred at the second examination will be required, before being admitted to re-examination, to produce certificates that they have pursued, to the satisfaction of their teachers, in a recognised place of study, their anatomical and physiological studies during a period of not less than three months subsequently to the date of their reference.

The fees for admission to the second examinations are: £10 10s. for the whole examination, and £6 6s. for re-examination after rejection.

The subjects of the third and final examinations are: —Part I. Medicine, including medical anatomy, pathology, practical pharmacy, therapeutics, forensic medicine and public health. Candidates who have passed in practical pharmacy at the first examination will not be re-examined in that subject at the third examination. Part II. Surgery, including pathology, surgical anatomy, and the use of surgical appliances. Part III. Midwifery and gynæcology. Candidates may take this examination in three parts separately, or they may present themselves for the whole examination at one time, provided that Midwifery may not be taken until the whole curriculum is completed.

Fees for admission to the third or final examination are as follows:—For the whole examination, £21 0s. Part I.—For re-examination in medicine, including medical anatomy, pathology, therapeutics, forensic medicine, and public health, £5 5s.; for re-examination in practical pharmacy (if taken at this examination), £2 2s. Part II.—For re-examination in surgery, including pathology, surgical anatomy, and the use of surgical appliances, £5 5s. Part III.—For re-examination in midwifery and gynæcology, £3 3s.

Candidates referred on the third or final examination, or on one or more of the three parts into which they may have divided it, will not be admitted to re-examination until after the lapse of a period of not less than three months from the date of rejection, and will be required, before being admitted to re-examination, to produce a certificate, in regard to medicine and surgery, of having attended the medical and surgical practice, or the medical or surgical practice, as the case may be, during the period of his reference; and in regard to midwifery and diseases peculiar to women a certificate of having received, subsequently to the date of his reference, not less than three months' instruction in that subject by a recognised teacher. A candidate who possesses a registrable qualification is admissible to re-examination without producing additional certificates.

Regulations for Colonial, Indian, and Foreign Candidates, and University Candidates.

Persons holding a Colonial, Indian, or a foreign qualification entitling them to practise medicine in the country of origin, and conferred after a course of study and examinations equivalent to those required by the Royal Colleges, are admissible to the second and third (final) examinations forthwith.

Members of a University in the United Kingdom and Graduates of Medicine of certain recognised Colonial or Foreign Universities, are, under certain conditions, eligible for admission to the third (final) examination two years after passing at their University in the subjects included in the first and second examinations of the Board.

Royal College of Physicians of London.

Members.—The membership of the College is granted after examination to persons above the age of 25 years who do not engage in trade, do not dispense medicine, and do not practise in partnership. This diploma is only granted to persons already registered, or who have passed the final examination for the licence.

Medical graduates of a recognised University are admitted to a pass examination, but others must have passed the examinations required for the licence of the College. The examination, which is held in January, April, July, and October, is partly written and partly oral. It is directed to medicine, and is conducted by the president and censors. Candidates under 40, unless they have obtained a degree in arts in a British University, are examined in Latin, and either Greek, French, or German. Candidates over 40 are not so examined, and the examination in medicine may in their case be modified under conditions to be ascertained by application to the Registrar. The fee for the membership is £42, but if the candidate is a licentiate £15 15s. is deducted. In either case £6 6s. has to be paid before examination.

Royal College of Surgeons of England.

Membership.—The candidates are now subject to the regulations of the Conjoint Board.

Fellowship.—The Fellowship of the College of Surgeons is granted after examination to persons at least 25 years of age, who have been engaged in professional studies for six years. There are two examinations—the first in anatomy and physiology, which may be passed after the third winter session; the second chiefly directed to surgery, which may be passed after six years of professional study. The second examination may be passed before attaining the age of 25, but the diploma is not granted until that age is reached. Candidates for this part of the examination must have passed the final examination of the Conjoint Board in England, and have been admitted members of the College before they can be admitted thereto, except in the case of graduates in medicine and surgery of recognised Universities of not less than four years' standing. The diploma of Fellow is granted to successful women candidates subject to the provisions of the Medical Act, 1876, and of the Bye-Laws of the College.

Fees.—First examination, £5 5s.; second examination, £12 12s. The total fee payable on admission to the Fellowship is £31 10s., except for members, when the fee is £21. (The examination fees to the extent of £17 17s. count as part of the total fee.) Further information can be obtained on application to the Secretary of the Examining Board in England, Examination Hall, Queen Square, Bloomsbury, London, W.C.

Society of Apothecaries of London.

Primary Examination.—This examination consists of two parts: Part I.—Elementary biology, Chemistry, Chemical physics, including the elementary mechanics of solids and fluids; Heat, Light, and Electricity. Practical chemistry, Materia medica, and Pharmacy. A synopsis indicating the range of the subjects may be obtained on application. Part II.—Anatomy and Physiology and Histology. The examination is held in January, April, July, and October.

The final examination is held monthly, except the month of September, and is divided into Sections 1 and 2.

Section 1 consists of three parts:

Part I. includes: Principles and Practice of Surgery, Surgical Pathology, and Surgical Anatomy, Operative Manipulations, Instruments and Appliances.

Part II. includes: (*a*) The Principles and Practice of Medicine, including Therapeutics, Pharmacology, Pathology, and Morbid Histology. (*b*) Forensic Medicine, Hygiene, Theory and Practice of Vaccination; and Mental Diseases.

Candidates passing either (*a*) or (*b*) will not be re-examined therein.

Part III. includes: Midwifery, Gynæcology, and Diseases of New-born Children, Obstetric Instruments and Appliances. Candidates may enter for Parts I., II., and III. together or separately.

Section 1 of the Final Examination, or any part thereof, cannot be passed before the expiration of 45 months from the date of commencement of medical study.

Section 2.—This section consists of two parts:

Part I.—Clinical Surgery.

Part II.—Clinical Medicine and Medical Anatomy. Section 2 cannot be passed before the expiration of the fifth year.

Fees.—Primary examination, £5 5s.; final examination, £15 15s.; total fee, £21.

Further information, with particulars as to the course of study and of the certificates required, can be obtained from the Secretary to the Court of Examiners, Apothecaries' Hall, E.C.

This licence is a registrable diploma in Medicine, Surgery, and Midwifery, and qualifies the holder to compete for medical appointments in the Army, Navy, and Indian Services, also for Poor-law, Civil, and Colonial appointments.

The Gillson scholarship in Pathology of the annual value of £90, tenable for one year, is open to Licentiates of the Society and to candidates for the diploma who obtain it within six months of election to the scholarship. An examination in the art of prescribing is held annually, in January, at which the following prizes are awarded:—A gold medal of the value of £6; a silver medal, and a prize of books.

LONDON SCHOOLS.

The Schools of Medicine in the Metropolis are the following, the scholarships, prizes, students' appointments, fees, &c., being set forth in connection with each place named. The names of the hospital staff, lecturers, residential terms, and detailed information will be found, as a rule, in our advertisement columns.

St. Bartholomew's Hospital.—This hospital has 750 beds, and for many years past the school attached has had a larger number of students than any other medical school in London. Laboratories have been specially equipped for the study of pathology, bacteriology, public health, chemistry, biology, physics, and chemical pathology, and two additional operation theatres have just been built. A new block of buildings has recently been completed at a cost of £120,000, and contains new casualty and out-patients' departments, eight special departments, quarters for the junior staff, a dining hall and a common-room for students, &c. A second new block, devoted to pathology, and containing extensive laboratories for bacteriology, clinical pathology, pathological histology, chemical pathology, etc., has also been constructed. Collegiate residence is permissible, subject to the ordinary rules.

Appointments.—Ten house physicians and ten house surgeons are appointed annually. During the first six months of office they act as "junior" house physicians and house surgeons, and receive a salary of £25 a year. During their second six months they become "senior" house physicians and house surgeons, and are provided with rooms by the hospital authorities, and receive a salary of £80 a year. A resident midwifery assistant, an ophthalmic house surgeon, and a house surgeon for diseases of the throat and nose are appointed every six months, and are provided with rooms and receive a salary of £80 a year. Two assistant anæsthetists are appointed annually, and receive salaries of £120 and £100 a year respectively. An extern midwifery assistant is appointed every three months, and receives a salary of £80 a year. Chief assistants and clinical assistants are appointed in each of the special departments. In-patient dressers, in-patient clinical clerks, clerks, and dressers to the assistant physicians, and assistant surgeons, and to the physicians and surgeons in charge of special departments, are appointed every three months without fee.

Scholarships, &c.—There are three open scholarships in science, £75, £75, £150, tenable for one year, and an Entrance Scholarship in Arts, value £100, and the Jeaffreson exhibition, value £50; at the end of first year four junior scholarships of £30, £20, £25, £15, respectively; Treasurer's prize for practical anatomy; Foster prize in practical anatomy; senior scholarship, value £50, for anatomy, physiology, and chemistry; Wix prize, Hichens prize, two Brackenbury scholarships, of £39, in medicine and surgery; Bentley prize, for reports of cases; the Kirkes gold medal for clinical medicine, with scholarship of £30. Shuter scholarship of £50; Skynner prize of £15; Sir G. Burrows' prize of £10; Matthews Duncan prize, medal and about £20; Willett medal and Walsham prize;

Holden Research Scholarship in Surgery, value £105; Lawrence Research scholarship and gold medal, value £115 for pathology.

Composition Fees.—(1) For students commencing their medical studies, one sum on entrance, 165 guineas; or by four instalments of 45 guineas. (2) For students who have passed an examination in preliminary science, in one sum on entrance, 145 guineas; or by instalments. (3) For students who have finished two years of medical study but have not passed an examination completing their anatomical and physiological studies; if paid in one sum on entrance, 110 guineas; or by annual instalments. (4) For students who have completed three years of medical study but have not passed an examination in anatomy and physiology, 90 guineas; or by annual instalments. (5) University students who have passed an examination completing their anatomical and physiological studies, in one sum, 80 guineas; or by instalments.

Fees for preliminary scientific students:—20 guineas; for laboratory instruction for D.P.H., 15 guineas. Fuller details will be supplied on application to the Dean.

Charing Cross Hospital.—The School attached to this Hospital is situated in Central London, and contains new pathological and bacteriological laboratories, pharmacological, materia medica, and public health, laboratories, theatre. Clinical instruction is given in medicine, surgery, and obstetrics, and in the special departments, diseases of the skin, diseases of children, mental disorders, the throat, the eye, nose and ear, and in the orthopædic, Röntgen and electrical departments.

The school arranges for a complete education in all departments, with special teachers for all preliminary and intermediate subjects.

By arrangement with the University of London, all students for the Primary and Intermediate portions of the curriculum carry out the necessary courses of instruction at King's College Laboratories, situated within a few minutes' walk from the Hospital. The entire teaching of the school is devoted to pathological, clinical and other subjects of final studies.

Appointments.—Salaried resident medical officer, medical and surgical and obstetric registrars (annual). Twelve resident house physicians, twelve house surgeons, and two obstetric officers are appointed each year, after competitive examinations.

Fees.—The fees for the five years' curriculum may be paid either by composition fee, in one sum, on joining, or by sessional payment system.

London University Student.—10 guineas entrance, and 25 guineas annually. Composition fee (5½ years) 120 guineas.

Conjoint Diploma Students.—10 guineas entrance, 22 guineas annually. Composition fee (5 years), 110 guineas. Payment may also be made for individual classes and hospital practice when taken separately.

Final Students.—Students of any university in the United Kingdom who have passed the examinations in anatomy, physiology, chemistry, and other preliminary subjects, may here complete their studies on payment of an annual fee of 25 guineas, or of 55 guineas (3 years' course) in one sum.

The fees for *Dental Students* for the two years' curriculum may be paid:—(*a*) in one sum of 45 guineas on entry (2 years' course); (*b*) in two instalments—one of 27 guineas on entry, and the second of 22 guineas at the commencement of the second twelve months.

Prospectus and further information can be obtained on application to the Dean (Dr. William Hunter, F.R.C.P.), Charing Cross School, Chandos Street, Strand.

St. George's Hospital.—This hospital is situated in the West End, facing Hyde Park, and is readily accessible from all parts of London or the suburbs. It has recently undergone extensive alterations and improvements, has a service of 436 beds, of which 100 are at the Atkinson-Morley Convalescent Hospital at Wimbledon, and contains special wards for ophthalmic cases and diseases of women.

Appointments.—Eight house physicians and eight house surgeons, entitled to reside and board in the hospital free of expense; twelve general assistants, six assistants in the special departments. Candidates for the above offices are selected quarterly by competition from among the perpetual pupils, sixteen pupils being in office at any one time. Obstetric assistant with a yearly salary at the rate of £50 and board and residence in the hospital; curator of the museum with a salary of £200; assistant curator with a salary of £100; a medical registrar, with a salary of £200 per annum; a surgical registrar with a salary of £200 per annum; a resident anæsthetist with a salary of £100 per annum; an administrator of anæsthetics with a salary of £50 and two with salaries of £30 per annum. All offices are open to candidates without additional fee.

There are two Scholarships open to University students, of 70 guineas and £50, particulars of which will be furnished by the Dean.

An *Athletic Ground* of 14 acres, in the grounds of the Convalescent Hospital at Wimbledon, has recently been acquired, and a football ground and tennis courts have been laid out.

Fees.—For first year, £21 or £26 5s., according to the course. For second and third years, £63 in two instalments. Students entering their names on the books before commencing the preliminary or intermediate subjects pay no entrance fee. Fees for clinical students: Entrance fee, 10 guineas; annual composition fee, 30 guineas.

Guy's Hospital.—This hospital is situated on the South side of London Bridge, and contains 617 beds in constant occupation. There are special wards for ophthalmic and obstetric cases, eight beds in the latter being appropriated for difficult cases of labour. Some beds have also been set apart for diseases of the ear and throat, and an "isolation" ward for cases of infectious diseases arising in the hospital. Attached to the hospital is a large residential college with rooms for about sixty men, whilst for students who prefer to live in the suburbs, no other hospital is so conveniently placed, the railway accommodation being good and close at hand. There is a complete School of Dental Surgery at this Institution, which is recognised by the Royal College of Surgeons of England; the facilities thus afforded of completing the whole course of dental study including the pupilage in mechanical dentistry within the walls of one hospital will be appreciated by those intending to practise dentistry.

Appointments.—Eight house surgeons, eight house physicians, sixteen out-patient officers, sixteen assistant house surgeons, twelve obstetric residents, two ophthalmic house surgeons, twenty-four clinical assistants, and ninety-six dressers are selected annually from the students according to merit, and without payment. There are also a large number of junior appointments, every part of the hospital practice being systematically employed for instruction.

Scholarships.—Open scholarships of £100 and £50 in classics, mathematics, and modern languages. Open scholarships of £120 and £60 in chemistry, physics, and biology, and an open scholarship of £50 for University students in two of the following subjects:—Anatomy, physiology, organic chemistry, zoology, physics. The following are the scholarships, prizes, and medals open to students of the hospital:—Junior prizes for general proficiency, £20, £15, £10; Hilton prize for dissection, £5; Michael Harris prize for anatomy, £10; Sands Cox scholarship for physiology, £15; Wooldridge prize for physiology, £10; Beaney prize in pathology, £34; Golding-Bird prize in bacteriology, gold medal and £20; Treasurer's gold medal in clinical medicine; Treasurer's gold medal in clinical surgery; Beaney studentship in materia medica (tenable for 3 years), annually £31 10s.; Gull studentship in pathology (tenable for 3 or 5 years), annually £150. The Arthur Durham travelling scholarship of the value of £100, triennially; Greville Research Scholarship,

£200 annually ; Oldham Prize in Ophthalmology, £30 annually.

Fees.—A new system for payment of composition fees has been instituted at this school. Particulars may be obtained on application to the Dean, Guy's Hospital, London Bridge, S.E.

King's College Hospital.—The hospital is situated close to the Royal College of Surgeons, Lincoln's Inn. There are 220 beds. The student, who pays a composition fee for the whole medical curriculum, carries out his preliminary and intermediate medical studies at King's College, Strand, and enters the hospital when he has passed his examination in anatomy and physiology. The hospital contains special beds for diseases of women, children, eye, ear and throat cases. There are also dental, skin, X-ray, and photographic departments. There are well-equipped pathological laboratories, and the collection of pathological specimens has recently been moved from King's College to the hospital. The various athletic clubs, students' societies, and the Common Room are now under the management of the Clubs and Societies' Union.

Scholarships.—Four of £50: one in arts and one in science, and two entrance scholarships for university students ; a senior scholarship for fifth year students, and many special and class prizes are open for competition amongst students.

Appointments.—Senior medical, surgical and obstetric tutorships, Sambrooke medical and surgical registrarships, tenable for two years, each £50 per annum. Resident hospital appointments—*viz.*, senior and junior house physicians, physician accoucheur's assistant and assistant house accoucheur, and three house surgeons with free board and residence at the hospital ; house anæsthetist ; and senior and junior clinical assistants in special departments every six months.

F.R.C.S. Examinations.—Special classes are arranged for the final F.R.C.S. examinations. Further particulars can be obtained post free from the Dean, Dr. H. Willoughby Lyle, or the Secretary, Clifton Kelway, Esq., King's College Hospital Medical School, Lincoln's Inn Fields, W.C.

Fees.—The fees payable by full students for the Course of Advanced Studies, whether for the University Degrees or for the Examinations of the Conjoint Examining Board, are : 80 guineas if paid in one sum ; 82 guineas if paid in instalments, as follows : 10 guineas at entrance ; first payment, 40 guineas on entering the Hospital ; 32 guineas at commencement of second year.

These fees also include membership of the Hospital Clubs and Societies' Union for three years.

Composition fees have been arranged for the complete medical courses.

(1) University of London Course, including the Preliminary Scientific, Intermediate, and Final Course. Fee, 150 guineas.

(2) Conjoint Examining Board Course, including the courses for the 1st, 2nd, and 3rd examinations. Fee, 150 guineas.

The London Hospital.—This hospital is the largest in Great Britain, containing, as it does, 922 beds. It has, moreover, wards and a teaching staff for every special department in the domain of medicine ; the scholarships and prizes are many and valuable.

Appointments.—The salaried appointments open to students are those of medical registrars three, surgical registrars three, obstetric registrars one, medical, surgical, and obstetric tutors ; senior dressers to outpatients ; clinical assistants in the medical, surgical, ophthalmic, aural, light and skin, orthopædic, and electrical departments. There are also five resident house physicians and eight resident house surgeons, two accoucheurs, seven receiving-room officers, two emergency officers, and three pathological assistants. Also unpaid clinical assistantships in the various special departments. In addition there are numerous assistantships and clerkships, and dresserships in the various departments.

Scholarships and Prizes.—At Entrance : Price scholarships in science, £100 ; in anatomy and physiology, £52 10s. ; entrance scholarships in science, £50 ; Epsom scholarship, £126 ; Buxton scholarships in arts, £31 10s. After Entrance : anatomy and physiology prize, £25 ; Letheby prizes, £25 ; prizes in clinical medicine, surgery and obstetrics, £20 each ; Duckworth Nelson prize, £10 ; Hutchinson prize, £40 ; Sutton prize, £20 ; Sir Andrew Clark prize, £26 ; Anderson prizes, £9 ; dressers' prizes, £40 ; practical anatomy prizes, £10 ; Douro Hoare prize, £5 ; Wynne Baxter prize, £5 5s.

A special course for the D.P.H. will commence at the beginning of the winter session.

Special classes for the 1st and 2nd M.B.Lond., the primary and final Fellowship, and other examinations are held. Those for the final and primary F.R.C.S. commence on September 2nd.

Fees for Full Course.—Entrance Fee 20 guineas ; annual Fee 30 guineas.

Special entries can be made either for single courses of lectures or for hospital practice. The Students' Hostel has recently been extended. Residential accommodation is obtainable at a very reasonable rate close by, or in the suburbs a few minutes' distant by train.

The Dental School attached to the Hospital will be opened on October 2nd. The Course of Instruction covers the full curriculum for the Dental Diploma.

Fuller particulars can be obtained of the Dean, William Wright, M.B., D.Sc., F.R.C.S.

St. Mary's Hospital.—This Hospital is situated at Paddington, near the terminus of the Great Western Railway, and at present contains 301 beds, of which 31, recently opened in the Clarence Wing, are devoted to treatment by Therapeutic Inoculation. An additional Operating Theatre has recently been opened in this wing. The Inoculation Department, instituted in 1906, has greatly expanded, and occupies a series of rooms in the New Wing of the Hospital.

The Department is under the personal supervision of Sir Almroth Wright, F.R.S.

During the present year a new Casualty Department has been opened, with increased accommodation.

The Athletic Ground is situated at Park Royal, Acton, within easy reach of the Medical School. This provides ample accommodation for the various athletic clubs, and possesses a good pavilion.

Appointments.—All clinical appointments in the hospital are free to students of the Medical School, and the resident medical officers are chosen by competitive examination. Six house physicians, six house surgeons, four obstetric officers, two resident anæsthetists, and two resident medical officers to the inoculation wards are appointed in each year, and receive board and residence in the Hospital.

Scholarships, &c.—One scholarship in natural science of the value of £100, open to any gentleman who has not completed a winter session of study at a medical school. One scholarship of the value of £50 and one of the value of £26 5s., under the same conditions. Two scholarships, each of 50 guineas, open to University Students. The scholarships will be awarded by examination on September 23rd, 24th and 25th.

Fees.—Fee for attendance on the full five years' curriculum of hospital practice and all lectures, demonstrations, and special tutorial classes, £140, paid in one sum on entering the school ; or in instalments, £145.

Students who have completed their examinations in anatomy and physiology at the Universities of Oxford, Cambridge, or other University, are admitted as perpetual pupils on payment of a fee of 65 guineas in one sum, or 70 guineas in two annual instalments. University students, prior to completing the anatomy and physiology examinations, pay an annual fee of 25 guineas. After completing the anatomy and physiology examinations, the inclusive fee may be paid.

Complete Curriculum.—The Medical School provides complete instruction for the various medical degrees and diplomas, including courses of preliminary scientific and intermediate subjects, which are recognised by the University of London as approved courses for internal students. Students may join in October, January, or April.

THE MIDDLESEX HOSPITAL.—The Hospital and Medical School are situated in Mortimer Street, at the top of Berners Street, and only a few minutes' walk from Goodge Street station (Hampstead and Charing Cross Tube), Oxford Circus stations (Bakerloo and Central London Tubes), and Portland Road station (Metropolitan station).

The Hospital contains 440 beds, including special wards for cancer cases, maternity and gynæcological cases, and for diseases of the skin and eye. The cancer wing (containing 90 beds) and special investigation laboratories offer unrivalled opportunities for the study of cancer, both in its clinical and pathological aspects. In the electro-therapeutical department students obtain instruction in the treatment of lupus and cancer by the X-ray method.

The Hospital and Medical School are fully equipped for the theoretical and practical teaching of all the subjects of the medical curriculum, and for the Diplomas in Public Health. Ample laboratory and class-room accommodation is provided, and there is a clinical laboratory where every facility is given for original research. Special classes are held to prepare students for the intermediate examinations of the Universities, and for the primary and final examinations for the F.R.C.S. (England) Diploma There is a residential college in the hospital for a limited number of students.

Hospital Appointments.—All appointments are made without fee of any kind, and the following appointments extend over six months:—Six house physicians, eight house surgeons, two obstetric and gynæcological house surgeons, two casualty medical officers, and two casualty surgical officers. Non-resident qualified clinical assistants are appointed to assist in the various out-patients departments. Clinical clerks and surgical dressers are also appointed in every department.

Scholarships, Prizes, etc.—Three entrance scholarships, value £100, £50, and £25, and a University Scholarship, value £50 (for Oxford and Cambridge students), are awarded annually in September. The successful candidates are required to become general students of the school. A Freer Lucas Scholarship, value £126, for students of Epsom College, is awarded annually on the nomination of the headmaster. There are also two Broderip Scholarships, value £60 and £40 respectively; the Lyell Gold Medal and Scholarship, value £55 5s.; the John Murray Medal and Scholarship, value £25 (awarded every third year; the Freeman Scholarship, value £30; the Hetley clinical prize, value £25; the Leopold Hudson prize, value 11 guineas; and the second year's exhibition, value 10 guineas. There are also numerous class prize examinations. In connection with the cancer investigation department, the following scholarships are awarded:—"Emden" Cancer Research Scholarship, value £100, tenable for three years; Richard Hollins Research Scholarship, value £105; Salters' Company Cancer Research Scholarship, value £100; and a Cancer Research Scholarship, value £60.

Fees.—The composition fee for general students is 135 guineas; for London University students, 145 guineas; for those who have passed the first examination for medical degrees, 120 guineas; those who have completed their anatomical and physiological studies, 70 guineas. The fee for dental students is 54 guineas. The fees may be paid by instalments.

The Amalgamated Students' Club includes the following:—The Medical Society, The Common Room Society, The Cricket Club, The Football Clubs, The Athletic Clubs, The Rowing Club, The Musical Society, The Chess Club, The Lawn Tennis Club, and The Hockey Club. The Athletic Ground which is eight acres in extent, is situated within easy access of the Hospital—at Park Royal. There is a Gymnasium within the precincts of the Hospital. A subscription to the Amalgamated Students' Club is payable by all General and Dental Students.

The Winter Session 1912-1913 will open on Tuesday, October 1st, at 3 p.m. The Introductory Address will be given by W. S. Lazarus-Barlow, Esq., M.D., F.R.C.P.

ST. THOMAS'S HOSPITAL.—This Hospital, with medical school attached, is situated on the southern Embankment of the Thames, facing the Houses of Parliament, and contains 602 beds, in constant use. The school buildings, which are separated from the Hospital by a quadrangle, comprise numerous theatres, laboratories, and class rooms, which are well adapted for the modern teaching of large bodies of students in all subjects of the medical curriculum. There is a large library and reading-room, and a very complete museum and gymnasium.

Appointments are open to all students. A resident assistant physician and a resident assistant surgeon are appointed annually at a salary of £100 with board and lodging. Four hospital registrars, two at an annual salary of £100 each, and two at £50 each, are appointed yearly. The tenure of these offices may be renewed for a term not exceeding two years. Four resident house physicians, four house surgeons, eight casualty officers, two resident obstetric house physicians, and two ophthalmic house surgeons are appointed each six months, also out-patient officers, and clinical assistants in the special departments.

Scholarships, Prizes, &c.—Five entrance scholarships are offered for competition in July—*viz.*, one of £150 and one of £60 in chemistry, physics, and biology at the commencement of the second year; one of £50 open to University students who have passed in anatomy and physiology, for a medical degree in any of the Universities of the United Kingdom, and have not entered as students in any London Medical school, and two scholarships in arts giving free tuition for the first year of curriculum. Numerous scholarships, prizes, and medals are open to competition throughout the whole career of a student, including a Fellowship of £100 given by the Salters' Company for research in pharmacology, and the Louis Jenner research scholarship, £60, for pathological research.

Special courses of instruction for the First Professional Examination and Intermed., M.B.Lond., for the Oxford and Cambridge examinations, and for the Primary and Final F.R.C.S. are held throughout the year.

A register of approved lodgings is kept by the medical secretary, who has a list of local medical practitioners and others who receive students into their houses. The prospectus of the school may be obtained on application to Mr. G. Q. Roberts, Secretary of the Medical School.

Fees.—A system for payment of composition fees is in operation. Full details may be obtained of the Secretary.

UNIVERSITY COLLEGE HOSPITAL AND MEDICAL SCHOOL.—*Entrance.*—A student may enter the school as soon as he has passed the University of London Matriculation Examination, or one of the other qualifying preliminary examinations. In this case he will pursue his preliminary and intermediate studies at University College, and his final medical studies at University College Hospital Medical School. The student who has completed his preliminary and intermediate medical studies elsewhere, may enter the University College Hospital Medical School for his final medical studies only. Qualified medical men and others who can produce evidence of sufficient qualifications may be admitted to special departments for the purposes of research, or to hospital practice for certain definite periods.

University College Hospital now accommodates 305 in-patients, and possesses extensive out-patient and special departments.

Thirty-eight clinical appointments, eighteen of which are resident, are filled up by competition during the year, and are open to students at the hospital without extra fee.

The new medical school provides for lectures, demonstrations and practical work in all the final subjects of the medical curriculum. There are three lecture demonstration theatres for the teaching of morbid anatomy, bacteriology, and chemical pathology;

also rooms equipped for the teaching of operative surgery and surgical anatomy, and two large lecture theatres.

The Medical Society, founded in 1828 for promoting the study of medical and surgical sciences amongst students, and for social intercourse, has rooms set apart for reading and recreation, and there is a large gymnasium with baths attached in the school buildings.

Scholarships, &c.—Entrance scholarship of 135 guineas, and two of 80 guineas each, the subjects being anatomy and physiology; the Graham scholarship in pathology, £200 per annum; the Atkinson-Morley surgical scholarship of £45 a year, tenable for three years; the Atchison scholarship, value £55, tenable for two years; Filliter exhibition for proficiency in pathological anatomy, value £30; Erichsen prize, operating case, value £10 10s., awarded for practical surgery; Fellowes gold and silver medals, the Liston gold medals, Alexander Bruce gold medal, Tuke medals for pathology, and other prizes, as well as certificates of honour, are awarded after competitive examinations in particular branches of study.

Composition Fees.—The Preliminary Scientific Course at University College, 26 guineas; Intermediate Course at University College, 58 guineas; final M.B. Course at University College Hospital Medical School, 80 guineas if paid in one sum, or 82 guineas paid in two instalments of 50 and 32 guineas.

Westminster Hospital.—This hospital is conveniently situated, facing the Abbey, and is readily accessible from all parts of the Metropolis. It contains 205 beds for general cases, and all the special departments. New school buildings have been erected close by, which afford accommodation for 150 students. The class rooms, museum, laboratories, and lecture theatre are excellent samples of modern erections, affording ample scope for study.

Appointments.—Medical and surgical registrars, each £50 per annum; two house physicians, three house surgeons, one assistant house physician, one assistant house surgeon, and a resident obstetric assistant. These officers, except the two first named, are all boarded free of expense. Qualified students are appointed to be clinical assistants in the various departments.

Scholarships, &c.—(*a*) Winter Session—The Guthrie scholarship, £60; subjects, Latin, mathematics, English, and either Greek, French or German. Two University scholarships, £50 each; subjects, anatomy and physiology. Natural science scholarship, £60; subjects, same as for Preliminary Science of University of London. Natural science scholarship, £30; subjects, chemistry and physics. (*b*) Summer Session.—Governors' scholarship in Chemistry and Physics, £40, Two University scholarships as for Winter Session. (*c*) Prizes to be competed for by unqualified men. Chadwick prize in Medicine and Surgery, 20 guineas, for students of any year not exceeding fifth. Bird medal and prize, in Obstetric Medicine, £14, for students who have completed fourth winter session. Sturges prize in Clinical Medicine, about £6, clinical surgery prize, £5. Abrahams prize in Clinical Pathology, 5 guineas. And class prizes in the various subjects.

Fees.—(*a*) The Annual Composition Fee is 25 guineas. This includes the subscriptions for membership of the Clubs' Union. (*b*) For shorter periods or for single courses the fees may be learned on application to the Dean. Fees for dental students, payable in one sum on entrance, 50 guineas, or in two instalments of £27 10s. each.

London (Royal Free Hospital) School of Medicine for Women.—The school is situated in Hunter Street, and the Royal Free Hospital is in Gray's Inn Road, close by. Students are prepared for the London University examinations and for the examinations of other Universities. A course of study is also arranged for the work required by the Royal Colleges of England, the Conjoint Colleges of Scotland and the Society of Apothecaries of London. The Royal Free Hospital contains 165 beds available for clinical study; and there is a large out-patient and casualty department. In addition to the ordinary systematic lectures at the school, clinical lectures are given at the hospital in medicine, surgery, obstetrics, ophthalmology, and dermatology. Students hold clerkships and dresserships in each department.

Appointments.—House physicians, house surgeons, and a senior and junior resident obstetric assistant are appointed yearly. There are also non-resident appointments, including the anæsthetists and assistant anæsthetist, assistant and clinical pathologists, medical and surgical registrars, curator of museum and clinical assistants.

Fees.—The fee for the University of London course and the course for the Royal Colleges of England is £160 in one sum, or £170 if paid in five instalments. The fee for the course for the Scotch Colleges or Society of Apothecaries, including Elementary Science, is £140 in one sum, or £150 in four annual instalments. Particulars as to scholarships, &c., can be obtained from the Secretary and Warden, Miss L. M. Brooks, 8 Hunter Street, W.C.

London School of Tropical Medicine.—The next session of the school commences on the 1st of October. The past year has been one of the most successful on record, and, for the session ending in July, 64 students entered. The course is so arranged as to equip men for the Cambridge Diploma in Tropical Medicine and Hygiene, the London Diploma in Diseases and Hygiene of the Tropics, as well as for the London University M.D. Special facilities are now afforded for advanced students in entomology, helminthology, and protozoology. The Wandsworth Scholarship of £350 and the Hon. Edward John Stanley Memorial Scholarship of £50 are awarded annually. The school provides three sessions each year. The buildings are being enlarged, and in the future it is hoped that there will be room for all who desire to take out the course. Arrangements are made in the neighbourhood for providing rooms where students can reside, and there is ample accommodation for all who desire to mess in the school.

INTRA-ACADEMICAL INSTITUTIONS IN LONDON.

The Royal Dental Hospital.—The teaching and hospital practice at this institution (situated in Leicester Square) are recognised by the various examining bodies. The new hospital and school, which was opened seven years ago, is complete in every detail with modern appliances. The clinic of the hospital is unrivalled, no fewer than 105,000 operations being performed in one year. The following scholarships and prizes are open to all full term students:—Entrance scholarships, of the value of £50 and £25, being awarded in October. Subjects: Chemistry and Physics, Saunders scholarship, of the value of £20, awarded to the student obtaining the highest aggregate number of marks in a special examination of the subjects of the final examination for the Dental half of the L.D.S. A scholarship of £25, the subjects being dental mechanics and metallurgy. There is also an Entrance Scholarship of £25 open to those who have studied "Dental Mechanics" under the tuition of a private practitioner. Storer-Bennet research scholarship of the value of £50, awarded once in three years; the Alfred Woodhouse scholarship of £30, and the Robert Woodhouse prize of the value of £10, for practical dental surgery. Class prizes are awarded by the various lecturers. Provision is made for teaching Dental Mechanics, as required by the Royal College of Surgeons, the pupils being under the guidance of the staff of dental surgeons assisted by specially appointed demonstrators. The school contains an excellent library and a well-arranged museum.

Fees.—For the two years' hospital practice and lectures as required by the Royal College of Surgeons of England, the fee is £53 3s. in one instalment, or £55 13s. in two yearly instalments. The fee for the complete curriculum, namely, two years' instruction in Dental Mechanics and two years' hospital practice and lectures, is £150 if paid in one sum, or 150 guineas if paid in three instalments of 50 guineas each. For one year's instruction in Dental Mechanics the fee is 50 guineas. For one year's hospital practice, £21. For the courses in Chemistry and Physics for the Preliminary Science Examination, £10 10s. The necessary course of two years at a general hospital can be taken simultaneously with that at the Royal Dental Hospital. Further particulars can be obtained on application to the Dean.

National Dental Hospital (The Dental Department of University College Hospital).—This institution is centrally situated (Great Portland Street, W.), and excellent teaching facilities and hospital practice are here obtainable, special demonstrations being given by members of the staff. There are also a mechanical laboratory, bacteriological laboratory, X-Rays Department, museum, students' common room, a metallurgical laboratory, extraction and stopping rooms, lecture hall, regulations room, &c., all lighted by electricity, and warmed and ventilated after the most approved requirements; in fact, this institution may be pronounced a model dental department of a general hospital and school. The winter session commences at the same time as at the medical school, on October 1st. The medical tutor holds special classes before each college examination. The prizes include two entrance exhibitions, value £40 and £20, and the Rymer prize of £5 5s., the examinations for which are held in May and October. The fee for two years' hospital practice required by the full curriculum, including lectures, is £200.

For qualified medical men the two years' training in dental mechanics, required by the R.C.S. Curriculum, can be taken in the Mechanical Laboratory, and there is a "Composition Fee" including all the dental subjects of the curriculum of £120.

Medical students are admitted to the practice of the following Metropolitan general hospitals to which no medical school is attached, but each contains over 100 beds. Detailed particulars will be supplied on application to the various secretaries.

Prince of Wales's Hospital, Tottenham.—This hospital contains medical and surgical wards and a ward for children, having in all 125 beds, with a very large out-patient department. There are special departments for gynæcological cases, diseases of the eye, ear, throat and nose, medical electricity and radiography, and skin diseases. It is authorised by the University of London to give certificates of post-graduate study for the M.D. and M.S. degrees. (Post-graduates of both sexes are admitted to the practice of this Hospital.)

West London Hospital, Hammersmith Road, W.—(Only qualified medical men are admitted to the practice of this Hospital). This hospital contains 160 beds, and has an extensive out-patient department. Three house surgeons and three house physicians are selected every six months. There are special departments for diseases of the throat, nose and ear, skin, women and children, and deformities. Electrical and X-ray departments have also been added.

Great Northern Central Hospital, Holloway Road, N.—This institution has been greatly enlarged, contains 182 beds, cases in various special departments are treated, and the hospital is now recognised for study during the fifth year by the Conjoint Board. The Pathological Department has been extended and a Director of Clinical Pathology appointed. The practice of the hospital is open to practitioners and senior students, and clinical and pathological assistants are appointed in the wards and out-patient departments, as in the larger general hospitals.

Bethlem Royal Hospital.—In this Royal institution only cases of lunacy are received, and students intending to pursue this special branch have the best possible opportunities afforded here. The hospital contains 300 beds, and two resident house physicians who have recently obtained their diplomas to practise medicine and surgery are elected every six months, and are provided with apartments, complete board, attendance, washing, and an honorarium of 25 guineas per quarter. The students of certain specified London medical schools receive clinical instruction in the wards of the hospital, and qualified practitioners may attend for a period of three months on payment of a fee. Post-graduate lectures are also given.

National Hospital for Epilepsy and other Diseases of the Nervous System, Queen Square, W.C., contains, with its country branch, 200 beds and cots. It is recognised by the Conjoint Board where part of the fifth year of study may be devoted to clinical work. Clinical clerks are appointed to the physicians for out-patients, and courses of lectures and clinical demonstrations are given each year.

London Temperance Hospital.—This Institution is situated in the Hampstead Road, and contains 100 beds, and is conducted, as its name implies, on non-alcoholic principles by an excellent staff. The medical and surgical practice is open to students and practitioners. Appointments (vacancies for which are advertised in the medical journals): Surgical and medical registrars, resident medical officer, and one assistant resident medical officer.

Metropolitan Hospital, Kingsland, N.E.—This was until recently known as the Metropolitan Free Hospital, is situated in the north-eastern district of the Metropolis, and contains 123 beds, besides 18 beds at a convalescent home. It is a general hospital, with a large medical and surgical staff, in which various special departments for the treatment of diseases of the eye, throat, ear, diseases of women, etc., will be found.

SPECIAL HOSPITALS.

Hospitals for Consumption.

Hospital for Consumption and Diseases of the Chest, Brompton.—The largest institution for the treatment of affections of the chest in the United Kingdom, there being 333 beds in the two buildings. There are six house physicians who reside in the hospital, each for a period of six months. Lectures and demonstrations are given by members of the medical staff on Wednesdays at four o'clock, save during the vacations. Terms, £2 2s. for three months; £5 5s. perpetual. A special course of instruction in the diagnosis and treatment of pulmonary tuberculosis will be held from November 4th to 16th. This hospital is recognised by the Conjoint Board, the University of London, and the Apothecaries' Society.

Mount Vernon Hospital, Hampstead and Northwood.—This institution, formerly called the North London Consumption Hospital, now carries on its work at Hampstead with 120 beds, and at Northwood with 106 additional beds, where treatment is carried out on the most modern lines, including the "open air" and other systems. Students are admitted to the practice of the hospital under certain conditions, and post-graduate courses are regularly delivered during the year.

City of London Hospital for Diseases of the Chest, Victoria Park.—This is a large and well-equipped hospital at the East End, containing 170 beds. Clinical lectures and demonstrations are given by the members of an exceptionally experienced staff. Fee for three months' attendance on hospital practice, 2 guineas; six months, 3 guineas.

Royal Hospital for Diseases of the Chest, City Road.—This hospital was established 100 years ago, and has been from time to time enlarged by the addition of a very complete out-patients' department, and also by the erection of a new wing, which provides accommodation for 80 in-patients.

Throat and Ear Hospitals.

Metropolitan Ear, Nose, and Throat Hospital.—This hospital was founded in 1838, and is situated in Fitzroy Square. The out-patient department is opened daily at 2.30 p.m. to practitioners and students desirous of acquiring clinical instruction and technical knowledge. Operations are performed on in-patients on Tuesdays, Wednesdays, Thursdays and Fridays at 10 a.m. Fee for one month's attendance at the hospital one guinea, and for three months two guineas.

Hospital for Diseases of the Throat, Golden Square, W.—This hospital contains 60 beds. Clinical instruction is given daily in the Out-patient Department on diseases of the nose, throat, and ear, and systematic courses of lectures are given during the winter session. There are nine clinics weekly, and an annual out-patient attendance of nearly 60,000. Major and minor operations daily (Mondays excepted) in different theatres. Thirty-six junior clinical assistants are appointed from among the students to assist the surgeons. Students are admitted to the practice of the hospital at the following fees:—Three months, £5 5s.; six months, £7 7s.; longer periods, £10 10s. Further detals can be had by applying to the Hon. Med. Secretary.

Central London Throat and Ear Hospital.—This hospital contains accommodation for 26 in-patients. It has a very extensive out-patient department (over 50,000 attendances yearly), which is open daily to all medical practitioners and students, for the purpose of clinical demonstration and instruction. Courses of practical teaching are held twice weekly by members of the staff, which are open to qualified practitioners and advanced students. Each course is of about seven weeks' duration, and includes hospital attendance for that period.

Operations are performed daily (Saturday excepted) at 2 p.m. Special attention is devoted to scientific work in the newly-equipped laboratory. Full particulars will be supplied on application to the Dean.

Women and Children.

Hospital for Sick Children, Great Ormond Street, Bloomsbury, and Cromwell House, Highgate. This is the largest Children's Hospital in the United Kingdom, and contains 240 beds.

The practice of the Hospital is open to qualified medical men, and to students who have completed four years of medical study, the Hospital having been recognised by the Conjoint Board of England as a place where six months of the fifth year may be spent in clinical work. There are special ophthalmic, aural, dental, and electrical departments. There is also a Museum and Library in connection with the School. Lectures are given every Thursday afternoon during session by members of the staff, and certificates are granted.—Fee for three months' attendance, £5 5s.; perpetual, £10 10s.; £1 1s. for students satisfactorily undertaking clinical clerkships for not less than three months. For tickets and further information, apply to the Secretary, by letter, or by calling at the Hospital.

Queen Charlotte's Lying-in Hospital, Marylebone Road, N.W.—Qualified medical practitioners and medical students are admitted to the practice of this hospital. Certificates of attendance are recognised by all universities, colleges and licensing bodies. Fee for the course of four weeks, £8 8s. Students are accommodated at the new Residential College (5 Cosway Street) opposite the hospital.

Arrangements have also been made for the preliminary instruction in midwifery now required by the General Medical Council. This will include:—(1) Practical instruction in the methods of examination of pregnant women; (2) delivery of women in labour under the direct supervision of a medical officer of the hospital; (3) practical instruction in the treatment of the mother and child during the puerperium, including clinics held four times weekly by the visiting medical staff. Fee for this special course will be £5 5s. per month.

East London Hospital for Children.—This institution was founded about sixty years ago in one of the poorest quarters of the East End of London, and contains 120 beds, with special departments for electric treatment. ophthalmic and dental surgery, etc.

Royal Waterloo Hospital for Children and Women.—This important institution, situated in South London, has been rebuilt and appointed on completely modern lines, and now provides 90 beds.

The Samaritan Free Hospital for Women, Marylebone Road, N.W., has 56 beds, and offers excellent opportunities to qualified medical men for clinical study and training in the details of operative gynæcology. Fee: Three months, £3 3s. The success of the staff in this department has gained for them a European reputation. There are 51 beds.

The Hospital for Women, Soho Square.—The hospital contains 67 beds. In connection with this institution there is now an organised school of gynæcology open to qualified medical men and to students after their third year. Clinical assistants to the physicians and surgeons in the in-patient and out-patient departments are appointed every three months. Fee for the three months' course, and certificate, £8 8s.

Chelsea Hospital for Women, Fulham.—This institution contains 50 beds, and is served by a staff of considerable eminence. In connection with it there is a Convalescent Home at St. Leonards, in which 22 additional beds are at the disposal of the authorities.

Eye Hospitals.

Royal Westminster Ophthalmic Hospital, adjoins Charing Cross Hospital in King William Street. It has about 40 beds and a very large out-patient *clinique*. The lectures and demonstrations are arranged with special reference to the requirements of practitioners and senior students. Fee, six months, £3 3s.; perpetual, £5 5s.

Royal London Ophthalmic Hospital, formerly in Moorfields, and recently rebuilt in the City Road, is the largest hospital devoted to this specialty in Great Britain, and contains 138 beds. Students and practitioners are admitted to the practice daily at 9 o'clock. Operations, 10 o'clock and after. Fee for six months, £3 3s.; perpetual, £5 5s. Further particulars of the Secretary.

Royal Eye Hospital, St. George's Circus,, Southwark.—There are 40 beds and two cots. Fees, £2 2s. for three months, £3 3s. for six months, and £5 5s., perpetual. Courses are held on ophthalmoscopy, refraction, and diseases of the eye; fee, £1 1s. for each course, but perpetual students may attend each course once without extra fee. Pathology class, £1 1s. extra to cover cost of materials.

Central London Ophthalmic Hospital.—This hospital is situate in the Gray's Inn Road, has 26 beds and a large out-patient *clinique*. The post of clinical assistant is open to both men and women, who must be duly qualified and registered practitioners. During the winter session commencing in October lectures and demonstrations are given in all the branches of ophthalmology.

Skin Hospitals.

St. John's Hospital for Diseases of the Skin.—Out-patient department, Leicester Square; In-patient department, Uxbridge Road, W. This hospital has a well-equipped in-patient department, with 40 beds. It has a School of Dermatology at 49 Leicester Square, which is conducted by the medical staff of the hospital. During the past year the free course of Chesterfield Lectures have been well attended. The Out-patient Department has recently been rebuilt at a cost of £10,000, and contains a spacious laboratory and special electrical department which can be seen in operation every afternoon except Saturday. Clinical demonstrations are given every day at 2 p.m., on Selected Cases.

The Western Skin Hospital.—This is one of the oldest institutions of the kind in the metropolis, and was started as long ago as 1851. It has recently been removed to larger premises in the Hampstead Road, and the practice of the hospital is open to students and practitioners, who have the opportunity of seeing daily a large number of out-patients. Applications should be made to the Secretary, 17a, Great Portland Street, W.

The Hospital for Diseases of the Skin, Stamford Street, Blackfriars.—This was the first hospital to be established for the treatment of cutaneous disorders in London. It has an extensive out-patient department, which is open to qualified practitioners. The hospital is shortly to be rebuilt.

METROPOLITAN POST-GRADUATE INSTITUTIONS.

Medical Graduates' College and Polyclinic.—This institution affords to medical practitioners special facilities for acquiring technical skill and advancing their medical and scientific knowledge. The building, which is large and commodious, is situated in Chenies Street, Gower Street, and contains lecture and consulting rooms, pathological and clinical laboratories, Röntgen ray room, an ophthalmoscope room, a library and museum, and reading and smoking rooms. *Cliniques*, at which patients are shown, are given every day of the week except Saturday, at 4 p.m. Lectures on Medicine, Surgery, and other allied subjects are delivered on Mondays, Tuesdays, Wednesdays, and Thursdays at 5.15 p.m. Four sessions of practical classes, each lasting six weeks, and two vacation sessions each of three weeks' duration, are held during the year, the subjects taught comprising anæsthetics, clinical examination of nervous system, clinical microscopy, clinical methods and physical diagnosis, clinical examination of stomach contents, cystoscopy, electro-therapeutics, gynæcology, intestinal surgery, laryngology, massage and medical electricity, ophthalmology, otology, orthopædics, rhinology, Röntgen rays, sigmoidoscopy, surgical anatomy and diagnosis. There are, in addition, extra-mural classes in operative surgery and practical anatomy with dissecting. Special tutorial classes in medicine, surgery, midwifery, and pathology for gentlemen reading for the higher qualifications have recently been instituted. and are conducted regularly throughout the year. The annual subscription for medical practitioners of either sex is One Guinea. Full information may be obtained from the medical superintendent, 22 Chenies Street, Gower Street, W.C.

West London Post-Graduate College.—The West London Hospital, Hammersmith Road, W., contains 160 beds; the post-graduate course was started in 1895, and this is the original post-graduate college in London attached to a general hospital. Instruction is given in the out-patient department daily at 2.15 p.m. by the assistant physicians and assistant surgeons. The physicians and surgeons attend daily at 2.30 p.m., when post-graduates can accompany them in their visits to the wards. Operations are performed daily at 2.30 p.m. Demonstrations are held every morning and there are lectures every evening at 5 p.m. (Saturdays excepted). Special classes are held in bacteriology, vaccine therapy, diseases of the eye, throat, X-rays, anæsthetics, intestinal surgery, tropical medicine, cystoscopy, venereal disease, operative surgery, &c.

Fees.—The fee for the hospital practice, including all the ordinary lectures and demonstrations, is £1 1s. for one week; £3 3s. for one month; £6 6s. for three months; £10 10s. for six months; £15 15s. for one year, and £30 for a life ticket. A course of attendance on either the medical or surgical practice alone may be taken out for the fee of £4 4s. for three months. The fee for three months' attendance in any one special department, other than medicine or surgery, is £3 3s. A prospectus containing full particulars will be forwarded on application to Mr. D. Armour, Vice Dean.

North-East London Post-Graduate College.—This post-graduate school is established in connection with the Prince of Wales's General Hospital, Tottenham, N., which is recognised by the University of London as a place of post-graduate study for the M.D. and M.S. degrees, and by the Admiralty and the India Office for purposes of study leave. Facilities are here afforded to qualified medical practitioners for taking part in the work of an active general hospital, and for attending demonstrations in various branches of medicine, surgery, and gynæcology, with opportunities for clinical instruction in diseases of the eye, ear, throat, nose, skin, in fevers, psychological medicine, the administration of anæsthetics, radiography and dentistry. Cliniques, lectures and demonstrations are given by members of the teaching staff in the lecture room, in the wards, in the various out-patient departments, and in certain affiliated institutions. Operations are performed every afternoon of the week, except Saturday. Special classes, the attendance at which is limited, are arranged in gynæcology, the surgical diseases of children, including orthopædic surgery, diseases of the throat, nose and ear, diagnosis of diseases of the nervous system, ophthalmoscopy and refraction, clinical pathology, diseases of the skin, abdominal surgery, radiography, bacteriology (which is accepted by the University of Cambridge for the D.P.H. diploma) vaccine therapy, pathological chemistry and medical electricity. The fee for a three months' course of study, which may be begun at any time, in any single department, is one guinea. A fee of three guineas admits to the whole practice of the hospital for a similar term (one month, 2 guineas), and a perpetual ticket for the practice of the hospital may be obtained on payment of a fee of 10 guineas. A vacation course will be held during the latter half of September, beginning on the 16th inst., the fee for which is 2 guineas. The opening lecture of the Winter Session will be given by Sir Almworth Wright towards the end of October. Additional information with a syllabus of lectures, demonstrations, and special classes, may be obtained from the Dean of the Post-Graduate College, Dr. A. J. Whiting, at the Hospital, or at 142, Harley Street, W.

London Post-Graduate Association.—This Association offers facilities for Clinical Study to qualified medical men. Joint cards of admission are issued to the Clinical Instruction of the following General Hospitals and Schools of Medicine:—Charing Cross, Guy's, King's College, St. George's, St. Mary's, St. Thomas's, University College, Westminster, beside several special hospitals. *Fee.*—For three months, 10 guineas; for six months, 15 guineas; and for any longer period at the further rate of 9 guineas for each additional six months. Further particulars may be obtained of the Secretary, London Post-Graduate Association, 20, Hanover Square, London, W.

The London School of Clinical Medicine is entirely reserved for qualified practitioners, no unqualified students being allowed to attend its cliniques and classes. The school is held at the Seamen's Hospital, Greenwich, with which are affiliated for teaching purposes the Royal Waterloo Hospital for Children and Women, the Bethlem Hospital, and the General Lying-In Hospital, all within the South-Eastern district. The Dreadnought Hospital is situated at Greenwich, and contains 250 beds, which are continually occupied by patients suffering from every variety of disease. It provides annually for 2,000 in-patients and 19,000 out-patients. The out-patient department at the Dreadnought Hospital is supplemented by the Society's dispensaries in the East India Dock Road, and at Gravesend, at which the present annual attendance is approximately 4,000 patients. The hospital is easily reached from London:—(*a*) By train from Charing Cross or Cannon Street to Greenwich Station, which is within five minutes' of the hospital. (*b*) By train from Charing Cross or Cannon Street, or from District and Metropolitan Stations to New Cross, and thence by electric tram (seven minutes). Out-patient cliniques are held in surgery, medicine, and the special departments every morning; whilst in the afternoons ward cliniques are given in medicine, in surgery, and in one of the special departments. Operations are performed daily. The fee for attendance on the ordinary practice of the hospital provides for admission to the wards, operating-theatres, post-mortem rooms, out-patient rooms, and cliniques. Most of the practical clinical classes, such as those in laryngology, ophthalmology and dermatology are included in the fee for Clinical Teaching, but may be omitted if desired. Other practical classes, such as operative surgery and pathology, are arranged each session.

The following are some of the principal provincial hospitals having the greatest number of beds, to which students are admitted, where clinical instruction can be obtained, but to which there is no medical school attached :—

Royal Berkshire Hospital.—The town of Reading, in which this hospital is situated, has a very large working-class population, and excellent opportunities for clinical instruction in the wards and extensive out-patient department are afforded here. This hospital, which contains 188 beds, has been recently enlarged, and there is also a splendid library, in which the Reading Pathological Society holds its meetings.

Bradford Infirmary.—The hospital contains 210 beds. Non-resident pupils are received and abundance of clinical material is obtainable in all the special departments of Medicine and Surgery. One year's attendance is recognised by the Examining Boards. Fee, perpetual, £10 10s.

Royal Devon and Exeter Hospital, Exeter.—This hospital contains 200 beds (including special children's wards), and numbers on its staff several well-known names; has a good library. Attendance on the practice of this hospital qualifies for all the examining boards, and students can attend Midwifery on application to the House Surgeon. Arrangements may also be made by which practitioners may have the use of the museum and library, and other facilities.

Leicester Infirmary is duly recognised by the various examining bodies, and contains 230 beds, and at the Children's Hospital in connection, 42. A new wing containing 100 beds has recently been added, together with a new Nurses' Home.

Liverpool.—The principal hospitals in this city, four in number, now form a combination for teaching purposes, in connection with the Liverpool University. These are referred to in another column, under "Universities," and are the Liverpool Northern Hospital, the Royal Southern Hospital, the Royal Infirmary, the Stanley Hospital, together with five special hospitals, the whole containing a total of 1,127 beds.

The Liverpool Skin Hospital and Extra-Mural School of Dermatology, in Pembroke Place, has eight beds and an Out-patient Department where over two thousand different patients are registered annually, and is open to Senior Students and Practitioners of Medicine. There is an excellently equipped "Light" Department where instruction is given in X-Ray and Finsen Light Therapy, and attached to the Hospital is a Museum of Dermatology. Terms for private instruction, 10 guineas per month. Dr. Stopford Taylor will give a course of twelve demonstrations, commencing to-day (September 14th). Fee for the course, 1½ guineas.

Norfolk and Norwich Hospital.—This hospital is recognised by the Colleges, and contains 230 beds. Fees, £10 10s. for six months, £15 15s. for twelve months' medical and surgical practice. Pupils, resident and non-resident, are admitted.

North Staffordshire Infirmary, Hartshill, Stoke-on-Trent.—This institution is built on the pavilion plan, and has accommodation for 216 patients, including children's wards, women's wards, and a special department for the treatment of diseases of the eye, so that there are excellent facilities here for acquiring a practical knowledge of the profession.

Nottingham General Hospital.—As a large commercial and industrial centre, Nottingham boasts of a large general hospital and several special institutions. The General Hospital contains 254 beds, and is staffed by several well-known physicians and surgeons. The practice is open to qualified members of the profession, and house appointments obtained hereat yield valuable material for study, especially in the direction of accidental injuries.

The Royal Sussex County Hospital, Brighton.—This hospital possesses about 196 beds, as well as a large out-patient department, and a well-appointed clinical research and bacteriological department. Hospital practice may be gained here for a period not exceeding two years on payment in advance of a fee of 20 guineas. There is also an excellent library attached.

Wolverhampton and Staffordshire Hospital.—This is one of the largest hospitals in the Midlands, and contains 212 beds. Situated as it is in the centre of the great coal and iron industries, it affords ample material for clinical study, and as the Hospital is recognised by the Royal Colleges, and has an excellent staff, its position is excellent.

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Ireland.

THE IRISH MEDICAL SYSTEM.

The system of medical teaching in Ireland differs from that in England in important particulars. In London each clinical hospital has its attached medical school, fully equipped, which educates the students of that hospital and very seldom those of any other. In Dublin, on the contrary, the hospitals and schools are entirely separate (except that Sir Patrick Dun's Hospital is officially connected with Trinity College), and a student of any school is free to enter for the whole or any part of his course at any school or hospital he pleases.

COST OF MEDICAL EDUCATION IN IRELAND.

The cost of obtaining a medical qualification depends to some extent on the qualification sought. In this connection the following tables may be of use to the prospective student :—

COST OF MEDICAL EDUCATION.

School of Physic, Dub. Univ. ..	£122 17s.
Royal College of Surgeons School	£124 19s.
University Colleges	About £125.
Queen's University, Belfast ..	£105

COST OF DIPLOMAS OR DEGREES.

Dublin University	£27 (to this must be added £83 4s., the cost of obtaining an Arts degree).
National University	£25.
Queen's University, Belfast ..	£19 19s.
Conjoint Royal Colleges ..	£42.
Apothecaries' Hall	£22 1s.

Thus, the absolute payment will amount to somewhere between £125 and £233 1s. according to the course chosen. For the Conjoint Colleges the entire cost is £166 19s., taking the minimum mode of payment. So that, assuming that extras or voluntary costs are incurred the total will vary, say, from £170 to £200. "Grinding," although not officially recognised, occupies a position similar to that of the extra-mural instruction of other schools. Its cost must be reckoned among the expenses of the course, for, while not essential, it has become customary for almost all students to obtain aid in their studies in this way. As a rule, this private instruction costs about £5 5s. for each of the four examinations.

The above sum, or something like it, may be expended by the student or his parent in paying for lectures, &c., and examination fees as they fall due, and there is no difficulty in obtaining the needful information for his guidance if he likes to pay for his course in this fashion.

All the schools require fees for each course to be paid in advance.

Women are admitted to all the courses, degrees, and licences on the same terms as men.

DATE OF ENTRY.

The entry of names and commencement of study in Ireland is *supposed* to date from the 1st of October in each year, but entries are accepted up to the end of that month, or in some schools even later. It should be remembered that no credit is given for studies or attendance until the entry is regularly made. The student must attend three-fourths of the lectures delivered, and if he loses any time at the beginning he must make up for it afterwards by constant attendance.

The student begins work by attending a recognised medical school each morning at ten o'clock, and occupying his day, to five p.m., between lectures and dissections. His vacations are a fortnight at Christmas and a fortnight at Easter, and the academic year ends at the end of June.

PRELIMINARY EXAMINATIONS.

The first act of the student is to pass a preliminary examination, without which he cannot get credit for any medical studies pursued. The next is to commence medical study. This he does by entering for lectures at a medical school. From the school registrar he gets a form of certificate, and his third act is to take it or send it to the Branch Medical Council, 35 Dawson Street, Dublin, unless, as is usually the case, this duty is undertaken for him by the school registrar. He is thereupon placed upon the Register of Medical Students (without fee), and his period of study counts from that date. He must register at the earliest possible moment, or he may lose credit for his work.

The only preliminary examination held specially for medical students is that held conjointly by the Royal Colleges of Physicians and Surgeons, but other examinations—*e.g.*, the public entrance at Trinity College, the matriculation of the National and Queen's Universities, the Intermediate Examination passes in the required subjects, and certain other examinations recognised by the General Medical Council, are accepted as equivalent.

The subjects of examination as prescribed by the General Medical Council are as follows:—1. English language, including a specified author, dictation, grammar, and composition; also parsing and analysis from a book specified. 2. Latin, including grammar, translation from specified authors, and translation of easy passages not taken from such authors. 3. Elements of mathematics, comprising (*a*) arithmetic, including vulgar and decimal fractions; (*b*) algebra, including simple equations; (*c*) geometry, Euclid, Books I., II., and III., with easy deductions. 4. One of the following optional subjects:—(*a*) Greek, (*b*) French, (*c*) German.

THE IRISH LICENSING BODIES.

The Medical Licensing Bodies of Ireland are five in number, and, as a rule, students will gravitate into one or other of six classes:—*a*. Those who enter Trinity College, and take a full graduation in Arts in addition to their professional degrees. *b*. Those who take the conjoint licence of the Royal Colleges of Physicians and Surgeons. *c*. Those who take their qualifications at the National University of Ireland, where graduation in Arts is not necessary. *d*. Those who enter Queen's University, Belfast, and take their course and degrees there. *e*. Those who take the licence of the Apothecaries' Hall. *f*. Those who pursue their studies in Ireland, but who migrate to London, Edinburgh, or Glasgow for their licences.

We do not attempt to give details as to the requisite courses of instruction for degrees or diplomas, as our epitome must necessarily be insufficient for the information of the student, and we can occupy our available space with information more useful to him. The official information upon which students may depend can be obtained by sending a note to the Registrars of the Licensing Bodies or Schools.

THE UNIVERSITY OF DUBLIN.

The University of Dublin grants the degrees of M.B., B.Ch., and B.A.O. to students who have obtained their B.A. degree, and who have been for at least five academic years on the books of the Medical School, and the higher degrees of M.D., M.Ch., and M.A.O. to graduates of certain standing who hold the degrees of M.B., and B.Ch. It does not grant degrees to any but graduates in Arts, and consequently its degrees hold a high rank, and are sought for by those who look forward to occupying the best positions in the profession.

The expense of obtaining the degrees of M.B., B.Ch., and B.A.O. is approximately as follows:—Lectures, £67 4s. 0d.; Hospitals, £55 13s.; Degree Fees, £27.—Total, £149 17s. 0d.

The expense of the B.A. degree, amounting altogether to £83 4s., should be added, making the total cost £233 1s. 0d.

Diploma in Medicine, Surgery, and Midwifery.—Candidates for the diplomas in Medicine, Surgery, or Obstetric Science must be matriculated in Medicine, and must have completed two years in Arts and five years in medical studies. The medical course and examinations are the same as for the degrees. Fees for the diplomas in medicine, surgery, and midwifery, £21. A diplomate, on completing his course in Arts and proceeding to the degree of B.A., may become a Bachelor of Medicine on paying the degree fees.

In addition to its ordinary qualifications the University grants the following degrees and diplomas:—

Doctor of Medicine.—To obtain this the candidate must have passed the final examinations, and be of M.A. standing. He must then read a thesis before the Regius Professor of Medicine. Fee for this degree, £13.

Master of Surgery.—The candidate must be a Bachelor in Surgery of three years' standing, and must then pass an examination in clinical surgery, operative surgery, surgical pathology, surgery, and surgical anatomy (on the dead subject). Fee for this degree, £11.

Master in Obstetric Science.—The candidate must have passed the M.B. and B.Ch. examinations, and have completed, in addition to the courses for M.B., B.Ch., a course of obstetric medicine and surgery. He is then required to pass an examination in the following subjects:—Practice of midwifery, gynæcology, anatomy of female pelvis and elementary embryology, and clinical gynæcology. Fee for this degree, £5.

Diploma in Public Health.—The candidate must be a Registered Medical Practitioner; must have completed, subsequent to obtaining a registrable qualification, four months' practical instruction in a laboratory in practical work in chemistry and bacteriology applied to public health; he must have studied practically outdoor sanitary work for six months under an approved officer of health; and have attended, after qualification, for three months, the practice of a hospital for infectious diseases.

Degrees in Dental Science.—Candidates for the B.Dent.Sci. degree in dental science must have taken a degree in Arts, and must have had their names in the books of the Medical School for four years. Three examinations must be passed—namely, the Preliminary Scientific at the end of the first year, the Intermediate at the end of the third year, and the Final Dental at the end of the fourth year. The total fees are £280 2s.

QUEEN'S UNIVERSITY, BELFAST.

The Queen's University confers the degrees of M.B., B.Ch., and B.A.O., on students who have followed the prescribed course of studies for five academical years, and passed the prescribed examinations. At least three of the years are spent in attendance on courses at the University. The expense is about £104.

Degrees of M.D., M.Ch., and M.A.O.—These degrees are not conferred until the expiration of at least three academic years, or, in the case of graduates of the University in Arts or Science, of at least two academic years, after admission to the primary degrees in the

Faculty of Medicine. Every candidate must show that in the interval he has pursued such courses of study, or been engaged in such practical work as may be prescribed. These degrees may be conferred by the Senate either (*a*) after an examination, which includes written, oral, clinical, and practical examinations; or (*b*) on the submission of a thesis or other evidence of original study or research, to be approved by the Faculty of Medicine, after an oral or other examination of the candidate on the subject thereof. On application for these degrees a fee of £2 2s., and on admission to them a fee of £8 8s., must be paid.

The subjects of the examination for the degree of M.D. are:—The Principles and Practice of Medicine, and one other special subject to be selected by the candidate from: (i.) Human Anatomy, including Embryology; (ii.) Physiology; (iii.) Pathology; (iv.) Pharmacology and Therapeutics; (v.) Sanitary Science and Public Health; (vi.) Forensic Medicine and Toxicology; (vii.) Mental Diseases.

The subjects of the examination for the degree of M.Ch. are:—(1) Surgery, Theoretical and Practical, including Ophthalmology and Otology. (2) Surgical Pathology. (3) Surgical Anatomy and Operative Surgery, with the use of surgical instruments and appliances.

The subjects of the examination for the degree of M.A.O. are:—(1) Midwifery. (2) Diseases of Women and Children. (3) Pathology in its special bearing on Midwifery, and Diseases of Women and Children.

Diploma in Public Health.—This diploma is given after examination to registered medical men, on similar conditions to those obtaining elsewhere.

NATIONAL UNIVERSITY OF IRELAND.

THE National University of Ireland confers the degrees of M.B., B.Ch., and B.A.O., on students who have followed the prescribed course for five academic years, and passed the prescribed examinations. At least three years must be spent at one of the constituent colleges of the University, viz., the University Colleges at Dublin, Cork, and Galway. The University also confers the higher degrees of M.D., M.Ch., M.A.O., B.Sc. (Public Health), D.Sc. (Public Health), B.D.S., and M.D.S.

The expense of obtaining the degrees of M.B., B.Ch., and B.A.O., is approximately:—Lectures, £68 5s.; Hospitals, £56 14s.; University Fees, £19. Total, £143 19s.

The conditions for the higher degrees are:—

Doctor in Medicine.—Candidates may present themselves for the examination for this degree after an interval of three academical years from the time of obtaining the M.B., B.Ch., B.A.O. degrees; but in the case of candidates who have obtained a degree of the University in the Faculty of Arts, an interval of two academical years is sufficient.

Candidates must at the same time produce a certificate of having been, for at least two academical years, engaged in hospital or private medical, surgical, or obstetrical practice respectively, or in the military or naval medical service.

Candidates at this examination must answer in Medicine and Pathology.

The examination in each subject consists of:—

(*a.*) A Written Examination.

(*b.*) An Oral Examination.

In addition every candidate must diagnose at the bedside at least three medical cases, and prescribe treatment. He must also write detailed reports on at least two cases, to be selected by the examiners, and discuss the questions arising thereon. Fee, £10.

Master in Surgery.—The following are the subjects of examination:—

Surgery, theoretical and practical, including Ophthalmology and Otology; Surgical Pathology; Surgical Anatomy and Operative Surgery, with the use of Surgical Instruments and Appliances.

The other conditions are the same as for the M.D. degree. Fee, £10.

Master in Obstetrics.—Academic standing is as for the two previous degrees.

Each candidate must furnish satisfactory evidence that since graduating in medicine he has (1) had personal charge of at least *twenty* cases of labour; and (2) attended during a period of three months the practice of a clinical hospital for diseases of women, where at least six beds are in constant occupation, or in a special ward of a general hospital, where such cases only are treated, and containing at least six beds in constant occupation.

Candidates at this Examination must answer in the following subjects:—Midwifery, Diseases of Women and Children, Pathology, the Use of Instruments and Appliances. The Examination in each subject consists of—(*a*) an Oral Examination, with practical illustrations, including use of instruments and appliances; (*b*) a written Examination; (*c*) a clinical Examination, as far as practicable. Fee, £10.

Bachelor of Science, Public Health.—A candidate shall not be admitted to receive the Degree of Bachelor of Science, Public Health, unless he—(*a*) shall have received the Degrees of M.B., B.Ch., and B.A.O. at least one year previously; (*b*) shall have pursued an approved course of study in the Faculty of Medicine; and (*c*) shall have passed the prescribed examination. Fee, £7.

Courses.—In addition to D.P.H. Course:—(1) Special Pathology (three months). (2) Bacteriology, second course (three months). (3) Advanced Course in Hygiene (three months).

Doctor of Science, Public Health.—The regulations are not yet published. Fee, £10.

Diploma in Public Health.—This Diploma may be granted to matriculated students of the University who shall have completed courses of study, approved for the purpose, and shall have passed the prescribed examinations: provided that it shall not be granted except to a registered medical practitioner. The conditions and examination are similar to those already quoted for the University of Dublin.

Degrees in Dentistry.—Candidates for the Degree of B.D.S. shall be required to pass, after matriculation, four University Examinations, namely:—A First University Examination in Medicine, as for medical students; a Second University Examination in Medicine, as for medical students; an Intermediate University Examination in Dental Surgery; a Final Examination for the Degree of B.D.S.

Students must follow a definite course of instruction, and must be, for at least two years, apprenticed to a registered dentist.

The regulations for the degree of M.D.S. are not yet published.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.

Examinations are held conjointly by the two Colleges. The course, as in other bodies, extends over five years, with examinations at the end of the first, second, third, and final years. These examinations are conducted by examiners chosen by each of the Colleges for the subjects appropriate to them. The curriculum has recently been revised, and made of a more practical nature. As in the English Colleges, the subjects of the First Professional Examination may be studied either at a medical school or at an institution other than a medical school which is recognised by the Colleges, after due inspection, for instruction in these subjects. We recommend students to apply for the official programme to the Secretary of the Committee of Management, Royal College of Surgeons, or to the Registrar of either College. In the case of the Preliminary Examination seven clear days' notice must be given to the Secretary; fourteen days' notice is required from candidates for the Professional Examinations.

The total of the examination fees, spread over the four examinations, is £42, while the school and hospital fees, if taken in Dublin, amount to £124 19s., making altogether £166 19s., exclusive of re-examination fees, which have to be paid in case the candidate fails to pass his examination.

The Colleges also confer a Diploma in Public Health, of which information will be found on page liii.

ROYAL COLLEGE OF PHYSICIANS OF IRELAND.

This College issues a Licence in Medicine and a Licence in Midwifery to registered medical practitioners.

Licence in Medicine.—The subjects of examination are:—Practice of Medicine, Clinical Medicine, Pathology, Medical Jurisprudence, Midwifery, Hygiene and Therapeutics.

Licence in Midwifery.—The subjects of examination are:—Gynæcology and Midwifery. A Registered Medical Practitioner of five years' standing is exempted from the examination by printed questions.

Fees.—Fee for the Licence to Practise Medicine, £15 15s. Fee for the Licence to Practise Midwifery, £5 5s.

Membership.—The Membership is open to University Graduates in Medicine and to Licentiates of the Royal Colleges of Physicians of the United Kingdom. The Examinations for Membership are held in January, April, July, and October, and such other times as the President may appoint. Fee to Licentiates of the College, £21, to others £36 15s.

Fellowship.—Fellows are elected from among the members of at least one year's standing. Fee £60.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

This College grants a Licence in Surgery to registered medical practitioners.

The subjects, methods, times, and places of examination are those of the surgical group of the Final Professional Examination of the Conjoint Board in Ireland of the Royal College of Physicians and the Royal College of Surgeons. (See their regulations.) Candidates must pass in all the subjects at one examination. Special examinations will not be granted under any circumstances.

A candidate whose name is entered either on the Medical Register for the United Kingdom, the Colonial Medical Register, or the Foreign Medical Register of the year in which he presents himself for examination, and who satisfies the Council that he has passed through a course of study and examinations equivalent to those required by the regulations of the Conjoint Board of the Royal College of Physicians of Ireland and the Royal College of Surgeons in Ireland, preceded by the passing of an examination in Arts recognised by the General Medical Council, may, at the discretion of the Council, be admitted to the examination.

Candidates are required to lodge their applications, declarations, and certificates with the Registrar, at least twenty-one days before the date of the examination.

The fee for examination is for each admission five guineas. Of these fees five guineas will be reckoned as part of the fee payable upon admission to the Licence in Surgery. The fee to be paid upon admission to the Licence in Surgery is twenty-five guineas.

Fees will not be returned under any circumstances.

All applications with reference to the examination for the Licence in Surgery should be addressed to the Registrar, Royal College of Surgeons in Ireland, Dublin.

Fellowship.—The examination for the Fellowship is divided into two parts,—viz.: The Primary and the Final. The subjects of the primary examination are—anatomy, including dissections, physiology, and histology. The examination is partly written, partly *viva voce*, and partly practical. Candidates must pass in all the subjects at one examination. The subjects of the final examination are—Surgery, including surgical anatomy, and pathology. The examination is partly written, and partly *viva voce*, and includes the examination of patients, and the performance of operations on the dead body. Candidates must pass in all the subjects at one examination. The examinations are held three times in each year, commencing:—The primary on the first Monday in March, the third Monday in July, and the third Monday in November. The final on the second Monday in March, the third Wednesday in July, and the fourth Monday in November. Special examinations will not be granted under any circumstances. Candidates are required to lodge their applications, certificates, and receipts for fees with the Registrar, at least seven days before the date of the examination.

Conditions of Admission to the Primary Examination.—A candidate must produce evidence of having completed the examinations in anatomy, physiology, and histology of a university or licensing body whose degrees or licenses entitle the holder to have his or her name placed on the Medical Register of the United Kingdom. A candidate whose name is entered on the Colonial or Foreign Medical Register of the year in which he presents himself for examination, and who satisfies the Council that he has passed through a course of study and examination equivalent to those required by the regulations of the Conjoint Board in Ireland of the Royal College of Physicians and the Royal College of Surgeons, preceded by the passing of an examination in Arts recognised by the General Medical Council, may also, at the discretion of the Council of the College, be admitted to the primary examination for the Fellowship.

Conditions of Admission to the Final Examination.—A candidate must have passed the primary examination, must be a licentiate or graduate in surgery of a university or licensing body recognised by the General Medical Council, and must produce a certificate of general good conduct, signed by two or more Fellows of the College, and evidence that he is not less than twenty-five years of age.

Fees.—1. The fees for examinations are as follows:—Primary examination, each admission, 5 guineas; final examination, each admission, 5 guineas. 2. Of these examination fees ten guineas will be reckoned as part of the fee payable upon admission to the Fellowship. 3. The fee to be paid upon admission to the Fellowship is forty guineas, except when the candidate is a Licentiate of the College, in which case the fee is twenty-five guineas.

All applications with reference to the examinations for the Diploma of Fellow should be addressed to The Registrar, Royal College of Surgeons in Ireland, Dublin.

Licence in Dental Surgery.—Candidates for the licence in Dental Surgery are required to pass two professional examinations. They must have passed a recognised Preliminary Examination in general education, and been registered as medical or dental students by the General Medical Council. They must have been engaged during a period of two years in acquiring a practical familiarity with the details of mechanical dentistry under the instruction of a registered dentist, or under the direction of the superintendent of the mechanical department of a recognised dental hospital where the arrangements for teaching Mechanical Dentistry are satisfactory to the Council of the College. This instruction may be commenced or attended before the Candidate registers as a medical or dental student. They must have been engaged during four years in the acquirement of professional knowledge subsequently to the date of registration as a medical or dental student. One year's *bona fide* apprenticeship with a registered dental practitioner, after being registered as a medical or dental student, may be counted as one of the four years of professional study. They must produce evidence of having followed a prescribed course of study. There are special exemptions in the case of persons already holding a surgical or dental qualification. All applications with reference to the examination for the Diploma in Dental Surgery should be addressed to The Registrar, Royal College of Surgeons in Ireland, Dublin.

APOTHECARIES' HALL OF IRELAND.

The Licence of this Hall is granted to students who present certificates of having fully completed the course of study as laid down in the curriculum, and who pass the necessary examinations. The diploma of the Apothecaries' Hall of Ireland entitles the holder to be registered as a practitioner in medicine, surgery, and midwifery, and possess the privileges of an apothecary.

There are three professional examinations, the total fees for which amount to thirty guineas. Women are eligible for the diploma.

Registered medical practitioners receive the diploma of the Hall upon passing an examination in the subject or subjects not covered by their previous qualification, and on paying a fee of fifteen guineas.

The fees payable for each examination are as follows: Professional Primary, £5 5s.; Intermediate, £10 10s.; Final Examination, £15 15s.

Applications and schedules, together with bank receipt for the fee, must be lodged with the Registrar, Apothecaries' Hall, 40 Mary Street, Dublin, at least fourteen clear days before the day of examination.

Candidates who desire to obtain the Letters Testimonial of the Apothecaries' Hall of Ireland, must, before proceeding to the Final Examination, produce evidence of having attended courses of instruction as follows:

One course each (winter course of six months) of the following: Anatomy (lectures), chemistry (theoretical), midwifery, practice of medicine, physiology and surgery. Dissections, two courses of six months each.

Courses of three months.—Materia medica, medical jurisprudence, chemistry (practical), practical physiology and histology, operative surgery, physics, clinical ophthalmology, biology, clinical instruction in mental disease, pathology, and a course in vaccination.

Medico-Chirurgical Hospital, twenty-seven months to be distributed over the last four years of study. The candidate may substitute for nine months in this hospital attendance six months as a resident pupil.

Three months' study of fever.

Six months' practical midwifery and diseases of women.

Three months' practical pharmacy in a recognised clinical hospital or a recognised school of pharmacy, or a year in the compounding department of a licentiate apothecary or a pharmaceutical chemist.

Each candidate before receiving his diploma must produce evidence that he has attained the age of 21.

Each candidate must produce evidence of having before entering on medical studies passed a preliminary examination in general education.

The details of the course of education required and syllabus of the examinations will be supplied on application to the Registrar at 40, Mary Street, Dublin.

THE DIPLOMA IN PUBLIC HEALTH.

This diploma is granted by Dublin University, the National University, Queen's University, and the Conjoint Royal Colleges. Every candidate must be a registered medical practitioner. The examination is in:—(1) Chemistry (including chemical physics). (2) Engineering and architecture. (3) Sanitary law and vital statistics. (4) Hygiene. (5) Bacteriology. (6) Meteorology. The General Medical Council recommend that all candidates shall have studied in a special bacteriological laboratory, also for six months as pupil of a working medical officer of health, described, for Ireland, as "the medical officer of health of a county or of one or more sanitary districts having a population of not less than 30,000; or a medical officer of health who is a teacher in Public Health of a recognised medical school."

THE IRISH MEDICAL SCHOOLS.

The Irish Medical Schools are as follows:—

The School of Physic of Dublin University.—Every student of the school must be matriculated in Medicine, for which a fee of 5s. is payable, but he need not attend any of the Arts course unless he desires to obtain a University licence or degree in medicine, surgery, and midwifery. No student is permitted to matriculate unless he has passed the Entrance Examination of Trinity College, or some other examination recognised by the General Medical Council. Two medical scholarships are given annually at the School of Physic, value £20 per annum, tenable for two years, the examinations for which are held each year in June; one scholarship is given in anatomy and institutes of medicine; the other in zoology, chemistry, botany, and experimental physics. A prize of £100 is awarded by the Board to the successful candidate at a special examination in alternate years in medicine or in surgery, provided that the merit be deemed sufficient. The successful candidate is required to spend three months in the study of medicine or surgery, as the case may be, in Berlin, Paris, or Vienna. Before he can obtain the first instalment of £50 he must satisfy the Senior Lecturer that he possesses sufficient knowledge of a Continental language to derive full benefit from the prize. The examination is held in June, and is open to students who have passed the Final Examination in Medicine or in Surgery, as the case may be, within two years of the examination.

In order to obtain the second sum of £50 the prizeman must have furnished to the Regius Professor his formal report on the hospitals attended by him within two years from the time of obtaining the prize.

The Sir John Banks Medal and Prize, founded by the late Sir J. Banks, M.D., Regius Professor of Physic, are awarded to the best and second best answerers at the Medical Travelling Prize Examination.

The Edward Hallaran Bennett Medal and Prize, founded by pupils of the late Dr. E. H. Bennett, formerly Professor of Surgery, are awarded to the best and second best answerers at the Surgical Traveling Prize Examination.

Class prizes are given at the end of the session of between £5 and £10 in value. The John Mallet Purser Medal, founded by Prof. Purser's past pupils, is awarded annually to the student who, at the ordinary June Intermediate Medical Examination, Part I., in Anatomy and Institutes of Medicine, obtains highest marks in Physiology and Histology, provided that he passes the examination in full, and the Cunningham Medal, *in memoriam* of the late Prof. D. J. Cunningham to the student, who, at the same examination, obtains highest marks in Anatomy, passes the examination.

Fitz-Patrick Scholarship.—This scholarship consists of the interest on £1,000. It is awarded annually to the student who obtains the highest aggregate marks at the five sections of the Final Examinations, provided that he has completed his medical course in the prescribed period of five years.

A School of Dental Science has been organised in connection with the School of Physic in Trinity College. Lectures are given in anatomy, chemistry, surgery physics, physiology and histology, dental mechanics, orthodontia and anæsthetics.

Post-Graduate Classes.—A short post-graduate course is now given annually in September in connection with Trinity College Medical School. It includes special work on Diseases of the Eye, Nose, and Throat, Gynæcology, Diseases of the Skin, X-ray work, Medicine, Surgery (clinical and operative), and Clinical Pathology.

The Royal College of Surgeons in Ireland, Schools of Surgery.—These schools are attached by Charter to the Royal College of Surgeons, and have existed as a department of the College for over a century. They are carried on within the College buildings, and are specially subject to the supervision and control of the Council. The buildings have been reconstructed, the capacity of the dissecting room nearly trebled, and special pathological, bacteriological, public health, chemical, and pharmaceutical laboratories fitted with approved appliances, in order that students may have the advantage of modern methods of instruction. There are special rooms set apart for women students.

All the lectures and courses of practical instruction may be attended by medical students who are otherwise unconnected with the College.

All the diplomas of the College are open to students of either sex. Separate rooms have been provided, and careful provision made for the instruction and comfort of women students.

Prizes.—The Barker Prize, £26 5s.; the Carmichael Scholarship, £15; the Mayne Scholarship, £8. The Gold and Silver Medals in Surgery and the Stoney Memorial Gold Medal in Anatomy.

Class Prizes of £2 and £1, accompanied by silver medals if sufficient merit is shown, will also be given in each subject. Prospectus and Student's Guide can be obtained on written application to the Registrar, Royal College of Surgeons, Dublin.

University College, Dublin.—This College is a constituent college of the National University of Ireland, for whose examinations and degrees it trains students. The examinations are conducted by the professors in the College, in conjunction with extern examiners appointed by the University.

Medical students must be registered with the Branch Medical Council at the commencement of their period of study. Forms of application can be obtained and filled up in the College. Information in respect of the necessary conditions for registration may be obtained from the Registrar of the College at the Medical School. The student must bring with him the certificate of his Matriculation examination, or of the Senior Grade examination of the Intermediate Education Board in the necessary subjects, and his birth certificate. Non-matriculated students intending to study medicine must have passed a Preliminary Examination, accepted by the General Medical Council, in English, Latin, Mathematics, and a Modern Language or Greek. Intending medical students who, for any reason, cannot begin the study of Medicine in the Winter Session, may do so in the Summer Session, but will not be able to complete the lectures of the first medical year until the following Winter Session.

The Scholarship Regulations provide for Six Scholarships of £30 each, tenable for one year in each of the 2nd, 3rd, 4th and 5th years of study. The Examinations for the Scholarships are held in October, the subjects being those studied in the previous year which Candidates must have attended in the College. Scholarships tenable for one year are offered at entrance at an Examination common to all Faculties.

There are Exhibitions of the value of £20 and £10 offered to students of the College at each of the Medical Examinations of the University; and a Gold Medal to the most distinguished answerer at the M.B., B.Ch., and B.A.O. Examination of the year.

Courses of lectures in Dental Surgery and Dental Mechanics are given to Dental students.

The Queen's University of Belfast.—This University provides all the classes required for a complete medical curriculum. The University contains laboratories in connection with the departments of Biology, Chemistry, Physiology, Pathology, Anatomy, Physics, and Materia Medica. In connection, too, is a Students' Union, which gives students the advantage of dining-rooms, reading-rooms, a library, and various recreation rooms. Women are eligible as students. Clinical instruction is given at the Royal Victoria Hospital, which was rebuilt a few years ago, and has 300 beds, and at the Mater Infirmorum Hospital, which has 160 beds. Other hospitals open to the students of the University are: The Maternity Hospital, the Ulster Hospital for Women and Children, the Hospital for Sick Children, the Ophthalmic Hospital, the Benn Ulster Eye, Ear, and Throat Hospital, the Union Infirmary and Fever Hospital, the Fever Hospital, Purdysburn, and the District Lunatic Asylum.

Scholarships.—(1) Seven Entrance Scholarships value £20-£40; (2) two Dunville Studentships (one each alternate year), value £150 each; (3) one Andrews Studentship each alternate year, value £145; (4) numerous sessional prizes.

Sixteen scholarships, value £15-£40, are now open for competition at the medical examinations in March and June. There is also a Post-Graduate Research Fund open to all graduates of not more than three years' standing. Information regarding these scholarships, etc., may be obtained on application to the Dean of the Faculty of Medicine.

Fees.—The cost of the curriculum intended for students proceeding to the degrees of the Queen's University of Belfast is, approximately, £105. This includes examination fees and a perpetual ticket for attendance at the Royal Victoria Hospital or the Mater Infirmorum Hospital, but not fees for the special hospitals. The course for the Conjoint Board costs about the same amount.

A pamphlet containing full information regarding the new regulations for courses, fees, etc., can be had free of cost on application to the Secretary, Queen's University, Belfast.

The University Colleges—Cork and Galway.—These important academic institutions educate students for all degrees and licenses, and are maintained, as hitherto, by Government grants. Various exhibitions and scholarships are available. Each college has the disposal of about £1,500 per annum in scholarships and prizes. The colleges are equipped with students' reading rooms and lending libraries and refreshment rooms, and with all adjuncts to collegiate life, such as literary societies and athletic organisations. The expense of living in the collegiate towns is quite moderate. The course of lectures in the winter session must be diligently attended, no student obtaining a certificate who has not put in three-fourths of a course. The scholarship examinations are held in October.

These Colleges are now constituent colleges of the National University of Ireland, and conduct examinations admitting to its degrees.

University College, Cork.—The arrangements in the Faculty of Medicine are made chiefly with reference to the requirements of the National University of Ireland, but students proceeding for the examinations of the Conjoint Boards of England, Scotland, or Ireland, can arrange the course of lectures which they attend, and the order in which they attend them, to meet the requirements of those bodies. Certificates of attendance in the college are also accepted by the University of London. The total fees for the college lectures and hospital attendances required by the National University of Ireland are about £104.

Clinical instruction is given at the North and South Infirmaries and at the Cork Union Hospital. Students can also attend the Mercy Hospital, the County and City of Cork Lying-in Hospital, the Maternity Hospital, the Hospital for Diseases of Women and Children, the Fever Hospital, the Ophthalmic and Aural Hospital, and the Eglinton Lunatic Asylum. The winter session commences on October 1st, and ends at the end of April. The courses of the summer session are delivered in the months of April, May, and June.

Between forty and fifty scholarships open to Medical Students are awarded annually (values £20-£50), as well as the Blayney Scholarship. This Scholarship, worth about £32, will be awarded to the candidate obtaining the highest marks in Honours at the M.B., B.Ch., B.A.O. Examination, held in Autumn at the College.

Further information can be obtained in the College Regulations, or on application to the Registrar, University College, Cork.

University College, Galway.—Clinical teaching is carried on in the Galway Hospital, established as a Public General Hospital (in the place of the County Galway Infirmary) by Act of Parliament 1892. The Galway Fever Hospital and Galway Union Hospital are also open to students. The conditions of Residence required by the National University for Graduation may be observed in Galway. The lectures qualify for the other Licensing Bodies.

Prizes.—There are eight Junior Scholarships in Medicine of the annual value of £25 each. Two are tenable by matriculated students of the first, second, third, and fourth years. There are, besides, private Foundation Scholarships open to medical students and tenable with medical scholarships. Sessional prizes are offered in each subject.

Like the sister College of Cork, this college is now a constituent college of the National University of Ireland.

ROYAL COLLEGE OF SCIENCE FOR IRELAND.

This College, situate in St. Stephen's Green, Dublin, supplies a complete course of instruction in science applicable to the industrial arts, especially those which may be cast broadly under the heads of Agriculture, Chemical Manufactures, Engineering, Physics, and Natural Science. A Diploma of Associate of the College is granted at the end of the three years' course. Non-

Associate students may join for any course required. There are several entrance scholarships, (*a*) in Agriculture, and (*b*) in Science and Technology, tenable for three years, of the value of £50 each yearly, with free tuition. There are four Royal scholarships of the value of £50 each yearly, with free education, tenable for two years. Two are competed for by the first year associate students at the end of each session. All the laboratories and drawing schools are open daily for practical instruction. The Science Scholarship Examinations are held during the first week in July, the Examinations for Agricultural Scholarships in the first week in September, and the Entrance Examination for intending Associates in the third week of September. For further particulars and copy of College Programme apply to the Registrar.

THE DUBLIN HOSPITALS.

The clinical hospitals in Dublin are ten in number, exclusive of three lying-in hospitals. There are also two children's hospitals, an orthopædic hospital, a fever hospital, an ophthalmic hospital, a dental hospital, and other special institutions. Some of the clinical hospitals, though they have no actual or official connection with any school, are in close affinity with certain teaching bodies; while others, again, are without any special connection with any school. While, however, such association of school and hospital may exist, it should be remembered that the Dublin schools and hospitals are open to all comers, and the student is free to attend any hospital or any school he wishes, and to change his hospital from year to year as he may see fit.

The Irish licensing bodies require attendance on hospitals for twenty-seven months—*i.e.*, three winter sessions of six months and three summers of three months, within the five years of study. The fee at all general hospitals is £8 8s. in winter, and for the summer £5 5s., or £12 12s. for the entire session of nine months if taken together.

GENERAL HOSPITALS.

Richmond, Whitworth, and Hardwicke Hospitals.—These hospitals contain over 300 beds. They are visited each morning at nine o'clock by the physicians and surgeons, and, in addition to the usual bedside instruction, clinical lectures are delivered on the most important cases. Instruction is also given on various special branches of medicine and surgery. The Truss Establishment, for the distribution of trusses to the ruptured poor of Ireland, is connected with these hospitals. There are ophthalmic, aural, throat, and gynæcological dispensaries, and instruction in these important subjects is given. A modern pathological laboratory, and a new mortuary have been opened recently. Twelve resident clinical clerks are appointed each quarter, and provided with furnished apartments, fuel, &c. The appointments are open not only to advanced students, but also to those who are qualified in medicine and surgery. A house surgeon for the Richmond Hospital and a house physician for the Whitworth and Hardwicke Hospitals are elected every six months, and receive a salary. The Richmond Lunatic Asylum, containing 1,200 beds, adjoins these hospitals.

Meath Hospital and Co. Dublin Infirmary.—This hospital was founded in 1753, and now contains 160 beds available for clinical teaching. A new building for the isolated treatment of fevers, containing 40 beds, has recently been added. The certificates are recognised by all the universities and licensing bodies of the United Kingdom. Medical and surgical resident pupils and clinical clerks and dressers are appointed every three months, and two house surgeons are elected annually. A prospectus giving the complete arrangements for medical and surgical classes for the coming session may be obtained from the Secretary of the Medical Board, Mr. Henry Stokes, F.R.C.S.I., 32, Upper Pembroke Street.

The Adelaide Medical and Surgical Hospitals occupy a central position within a few minutes' walk of the College of Surgeons and Trinity College. From October 1st, the physicians and surgeons visit the wards and give instruction at the bedside at the advertised hours. There is a large detached fever hospital, and there are wards for infants and children. Operations are performed, at 10 a.m. on Tuesday, Thursday, and Friday. Special hours are devoted to clinical instruction in the diseases peculiar to women; also special instruction is given on practical pathology and X-ray photography. Two House Surgeons are elected annually and four resident pupils half-yearly. Prize examinations for the Hudson Scholarship of £30 and a gold medal, and Hudson prize of £10 and a silver medal, and for surgical, medical and dermatological prizes, are held at the termination of the session. The large dispensaries afford facilities for the study of ear, throat, and cutaneous diseases, as well as of minor surgery and dentistry. Further particulars from Dr. H. T. Bewley, 89 Merrion Square.

The Royal City of Dublin Hospital.—This hospital has recently been enlarged and improved. A special course of instruction is given in ophthalmic and aural diseases. There are special wards for the treatment of diseases of the eye, of children, and of women, and practical instruction is given on diseases peculiar to women; there is also a separate building for infectious diseases. Clinical clerks to the physicians and dressers to the surgeons are appointed from the most deserving of the class. A new operation theatre, sterilising room, and anæsthetic room have been constructed in accordance with modern surgical requirements. A department for Röntgen-ray and light treatment of lupus has been added. A resident medical officer is elected annually, and resident medical and surgical pupils are appointed from among the past and present students of the hospital. Operations are performed on Tuesdays, Thursdays, and Saturdays, at 10 a.m. Special classes for first year students. Full particulars can be had on application to Hon. Sec. Med. Board.

Sir Patrick Dun's Hospital is situated on the south-eastern side of the city, and about a quarter of a mile from the University School of Physic. It is officered almost exclusively by the professors in that school. Formerly all University students were compelled to attend this hospital, which was purely a medical institution, but many years ago the obligation was removed, and the hospital was opened for surgical cases. It is now open to all students. There is a special wing devoted to fever cases, and regular clinical instruction is given by the members of the medical staff throughout the winter and summer sessions. Special classes for students commencing their hospital studies will be held in the wards during the months of October, November, and December. They will embrace the elements of medicine and surgery, including note-taking. Opportunities are also afforded to students for examining cases of throat, ear, and eye diseases, as well as for performing minor surgical operations and bandaging. In the X-ray Department opportunities are given the members of the hospital class of seeing the various applications of the X-rays to the diagnosis and treatment of injury and disease. Arrangements have been made for practical instruction in anæsthetics. A department for dentistry has lately been added.

Mater Misericordiæ Hospital, Dublin.—This hospital, at present containing 345 beds, is open at all hours for the reception of accidents and urgent cases. Clinical instruction is given by the physicians and surgeons at 9 a.m. daily. A course of clinical instruction on fever is given during the winter and summer sessions. A certificate of attendance upon this course, to meet the requirements of the licensing bodies, may be obtained. Ophthalmic surgery is taught in the special wards and in the dispensary. Surgical operations are performed on Mondays, Tuesdays, Fridays and Saturdays at 11 o'clock. Connected with the hospital are extensive dispensaries, which afford valuable oportunities for the study of general medical and surgical diseases and accidents. Instruction is given in pathology and bacteriology. Three house physicians, six house surgeons, and 16 resident pupils are elected annually. Dressers and clinical clerks are also appointed, and certificates are given to those who perform their duties to the satisfaction of the staff. Leonard Prizes are offered for competition annually. For further particulars see prospectus. Certificates of attendance upon this hospital are recognised by all the universities and licensing bodies in the United Kingdom. A training school and a home for trained nurses have been opened in connection with the Hospital.

Terms of attendance.—Nine months, £12 12s.; six winter months, £8 8s.; three summer months, £5 5s. Entries can be made with any of the physicians or surgeons, or with the Registrar, Dr. Martin Dempsey, 35 Merrion Square. A prospectus containing in detail the arrangements for clinical instruction, prizes, etc., may be obtained from the Secretary, Medical Board.

Mercer's Hospital.—This hospital, founded in 1734, is situated in the centre of Dublin, in the immediate vicinity of the Schools of Surgery of the Royal College of Surgeons, the National University School of Medicine, and Trinity College. It contains 120 beds for medical and surgical cases, and arrangements have been made with the medical officers of Cork Street Fever Hospital whereby all students of this hospital are entitled to attend the clinical instruction of that institution. There is a large out-patient department, and a special department for diseases peculiar to women. There are also special wards for the treatment and study of children's diseases. During the past few years the hospital has undergone extensive alterations in order to bring it up to modern requirements. A house surgeon is appointed annually. Five resident pupils are appointed, each for six months, and clinical clerks and dressers are appointed monthly from among the most deserving members of the class. The certificates of this hospital are recognised by all the licensing bodies. For further particulars apply to Mr. Seton Pringle, F.R.C.S., 27 LowerBaggot Street, Dublin.

St. Vincent's Hospital was established in 1834. It has 160 beds, and in connection with it there is a largely attended dispensary, and a nurses' institute. In addition to the ordinary clinical instruction, systematic courses of lectures are given in each department of medicine and surgery, and are illustrated by cases in the hospital. The resident officers consist of two house surgeons, two house physicians, and six resident pupils. Three clinical lectures are delivered daily in the wards, illustrated by selected cases, and beginning at 9 a.m. Two gold medals and other valuable prizes and certificates of merit are awarded at the end of each session. A prospectus can be had from Mr. Kennedy, 68 Merrion Square.

Dr. Steevens' Hospital, situated at Kingsbridge, is one of the oldest and largest clinical hospitals in Dublin, and contains over 200 beds. A new dispensary and out-patient department has been completed and opened to patients. There is accommodation for twelve resident pupils—four medical, six surgical, and two in the special departments, each of whom is supplied with a separate room. All information with regard to these appointments can be had from the Resident Medical Officer at the hospital. Licensing bodies recognise six months' residence as equivalent to a year's ordinary attendance at hospital. The manufactories and railway works in the neighbourhood supply this hospital with large numbers of accidents and other cases, while a special ward for venereal diseases affords exceptional opportunities for the study of this important subject.

Jervis Street Hospital is the oldest established in Dublin. The new building was completed in 1896, since which time it has been open for the reception of patients. In addition to large medical and surgical dispensaries, the new out-patient department which is now completed, includes special departments for the treatment of diseases of the skin, eye, ear, and throat, and diseases peculiar to women. Four resident surgeons are appointed annually. Clinical clerks and surgical dressers are selected from among the most attentive of the advanced students without the payment of any additional fee. Twelve resident students are appointed annually. Special certificates are given to resident pupils and dressers who have performed their respective duties to the satisfaction of the physicians and surgeons.

Students of Jervis Street Hospital are entitled to attend free of charge special courses in fevers at Cork Street Fever Hospital. Prospectus and all particulars may be obtained from the Hon. Secretary of the Medical Board, Dr. F. X. Callaghan, 25 Westland Row, Dublin.

SPECIAL HOSPITALS.

The chief of the special hospitals of Dublin are the Rotunda, the Coombe, and the National Lying-in-Hospitals, Cork Street Fever Hospital, the Royal Victoria Eye and Ear Hospital (amalgamation of St. Mark's Ophthalmic Hospital and the National Eye and Ear Hospital), the Dental Hospital, the Orthopædic Hospital, and the Children's Hospitals in Harcourt Street and in Temple Street.

The Rotunda Hospital.—This institution is the largest and the oldest gynæcological and maternity hospital in the British Empire. The work performed by it is about three times greater than that of any other hospital of its kind in Ireland. The number of patients admitted to the hospital, and of those attended in the extern maternity has increased enormously within recent years. The routine daily work comprises the attendance on lectures on midwifery and gynæcology; practice in abdominal palpation; personal conduction of parturition both in the extern and the intern maternities; cystoscopic examinations; and attendance at the operative work of the hospital in which the students assist. The hospital affords exceptional advantages to qualified men, for they (if considered competent) are permitted a certain amount of practical operative work—viz.—use of forceps, curettings, perineorrhaphy, &c. A special afternoon class in gynæcology is held by the Senior Assistant, and one in special pathology by the Pathologist. Fee for each, £2 2s. per month. The pathological laboratory under the direction of Dr. Rowlette has become an important feature of the hospital. Students can enter at any time for periods of one month or longer. Certificates of attendance are accepted by all the licensing bodies. The L.M. certificate is obtained by attendance at the hospital for six months, with the subsequent passing of an examination. A special certificate in gynæcology is presented to students whose work meets with the Master's approval. Paid clinical assistants are selected (from amongst those who have obtained the hospital L.M. certificate), for periods of six months. Women students can also reside in the hospital under conditions similar to men. The grounds of the hospital contain grass courts for lawn tennis and croquet, and a skating rink. There is also a full-size billiard table.

Fees for Pupils.—Intern.—One month, £6 6s.; two months, £9 9s.; three months, £12 12s.; six months, £21; single months other than the first, £4 4s.; board and lodging in the house per week, £1 5s. Night students (not resident in house), £6 6s. for first three months; £4 4s. for the second three months. For further particulars apply to the Master, Dr. Henry Jellett, Rotunda Hospital, Dublin.

Coombe Lying-in Hospital.—This hospital, which devotes itself to the care of lying-in women, and to the treatment of diseases peculiar to women, was founded in 1826. The original hospital was removed, and the present maternity hospital erected in 1875. An up-to-date labour theatre and waiting ward were added in 1904. The new Gynæcological Hospital was finished in 1903. It contains two modern operating theatres. The former Gynæcological Hospital has been converted into sleeping rooms for resident pupils. The Pembroke Dispensary was opened in 1911. The hospital is situated centrally in a most densely populated district. In addition to a very large gynæcological practice, over 2,000 women are delivered annually. The Master visits the maternity wards daily with the students at 9.30 a.m. This is followed by a lecture on midwifery. At 11 a.m. the gynæcological wards are visited; following this a lecture on gynæcology, physical examinations, and operations take place in the theatres. At 4 p.m. on Mondays, Wednesdays, and Fridays, the Master conducts the gynæcological out-patient dispensary. This dispensary affords students exceptional advantages of acquiring a thorough knowledge of gynæcological diagnosis. At 5 p.m. on Tuesdays and Thursdays, the Master conducts a special class in practical obstetrics, including palpation, auscultation, pelvimetry, and operations on the phantom. Lady medical students can reside in the hospital. Extern assistants are appointed from among the students as vacancies occur. These most responsible appointments afford the students every opportunity of making themselves competent in practical midwifery. Candidates for the diploma of the Coombe Hospital shall have their names on the books of the hospital for six months, during which time they shall attend as frequently as possible, and be present at 30 deliveries. They shall then present themselves for examination, and if found qualified will receive the diploma. The catering for the residents is in the hands of a competent housekeeper. Board and lodgings, £1 1s. per week. The students' quarters are comfortably furnished.

Fees.—Extern pupils (for full course of six months), £8 8s. This includes one month's residence in hospital. Intern pupils—one month, £4 4s.; each consecutive month, £3 3s.; six months and L.M. diploma, £18 18s. Board and lodging in the hospital, 18s. per week. Lady students, intern—one month, £5 5s.; each consecutive month, £4 4s.; six months and L.M. diploma, £18 18s. Registration fee, 10s. 6d. There is no extra charge for attendance at any of the dispensaries. Certificates of attendance from this hospital are accepted by all the licensing bodies.

*NATIONAL MATERNITY HOSPITAL.—This institution, under the joint mastership of Dr. A. Horne and Dr. R. White, is situated in Holles Street.

*CORK STREET FEVER HOSPITAL contains 266 beds. It is supported by subscriptions, an annual Government grant, and capitation grants for patients. Regular clinical instruction is given during the winter and summer sessions to those who desire a special course in fevers. There are also courses for the Diploma in Public Health. All particulars may be obtained on application to the Medical Superintendent.

THE NATIONAL CHILDREN'S HOSPITAL for the treatment of all non-infectious diseases peculiar to children, with which the Pitt Street Children's Hospital, founded in 1821, was amalgamated, contains 45 beds for the reception of cases of deformity and all other forms of surgical disease. There is a general dispensary for extern patients held daily from 10 to 11. Operations are performed on Saturday at 12 o'clock. Practitioners and students can attend on application to Sir Lambert H. Ormsby, F.R.C.S.I.

*THE CHILDREN'S HOSPITAL, Temple Street, Dublin (under the care of the Sisters of Charity).—This institution is the largest children's hospital in Ireland. There are 100 beds available for patients; about 1,000 cases are admitted to the wards annually; and about 7,000 or 8,000 seen in the dispensary. A new operating theatre has recently been opened. It is fitted and furnished in the best possible fashion for present-day surgery. Special attention is given to orthopædic surgery.

The hospital is recognised for clinical instruction in the diseases of children by those licensing bodies which require a certificate of instruction in this important branch of medical education. A nursing home is in connection with the institution, and trained nurses are always available for private cases. Senior students or others requiring a post-graduate course at the hospital should apply for full particulars to Dr. M. C. Staunton, hon. sec., or to any member of the staff.

THE INCORPORATED ORTHOPÆDIC HOSPITAL, IRELAND.—This hospital was founded in 1876, and contains 80 beds. It is available for every class of deformity available for treatment. Particulars may be obtained from Miss Graves, secretary, at the hospital.

THE ROYAL VICTORIA EYE AND EAR HOSPITAL, Adelaide Road.—This hospital, which was opened in March, 1904, is an amalgamation of St. Mark's Ophthalmic Hospital and the National Eye and Ear Infirmary. The hospital contains 80 beds. Clinical instruction in diseases of the eye and ear, including the use of the ophthalmoscope and operations, is given daily from 10 till 1. Special classes for practical instruction in the use of ophthalmoscope, &c., and for the demonstration of cases, are formed from time to time.

THE INCORPORATED DENTAL HOSPITAL, Lincoln Place.—This hospital is the only special dental hospital in Ireland. It is officered by a strong staff of the leading dental surgeons of Dublin, and has a large *clientèle* and extensive practice among the Dublin poor. The fees are £12 12s. for each year's Dental Hospital practice, and proportionately smaller fees for shorter periods for surgeons and medical students. The term of pupilage in mechanical dentistry required by the various licensing bodies may be taken in the recently enlarged Hospital Laboratory. Particulars may be obtained from the Dean.

THE CITY HOSPITAL FOR DISEASES OF THE SKIN AND CANCER, Holles Street.—Senior students are admitted free to the practice of this hospital, which has a large out-patient attendance, with 15 beds for intern cases. Classes of instruction will be given at regular intervals during the winter and summer sessions in the use of the Finsen light, X-rays, high frequency currents and radium, with demonstrations on (1) the production and use of the Röntgen rays, (2) electric currents, direct and alternating, with description of resistances, rectifiers and transformers; (3) accumulators, their construction, use, and methods in charging; (4) vacuum tube, choice of tube for particular kinds of work; fluorescent screen, and how to localise foreign bodies.

BELFAST HOSPITALS.

ROYAL VICTORIA HOSPITAL.—Established 1791; incorporated by Royal Charter, 1875 and 1898. New hospital opened, September 17th, 1903. 300 beds; Convalescent hospital, 22 beds; Children's Hospital, 33 beds; Consumptive Hospital, 10 beds.

Clinical instruction in medicine and surgery is given each morning by the staff.

*MATER INFIRMORUM HOSPITAL.—Established 1883. 160 beds. The New Mater Hospital, which was erected at a cost of over £50,000, was formally opened on April 23rd, 1900. During the year the intern patients numbered 1,525; accidents, 3,762, and cases treated in the Dispensary, 22,597; 389 surgical operations were performed with the most satisfactory results. The total number of patients who received treatment was 27,884, being an increase of 1,517 as compared with the year 1904. A notable feature is in the number of accident cases, as the hospital is conveniently situated in proximity to a large working-class population, and within easy reach of most of the public works.

THE BELFAST MATERNITY HOSPITAL (INCORPORATED).—Established 1794. 30 beds.—The practice of the Maternity Hospital, the certificate of which is recognised by all the universities and colleges, &c., is open to students. The fee for the session is £2 2s. Resident nurses are also received for training for a period of six months, and a diploma given which is recognised by public bodies. The hospital course is also recognised by the Central Midwives Board. Conditions for such on application to the Matron. During the year 1911, 567 patients were treated in the hospital, and 556 patients at their own homes. Besides this, 360 patients were dealt with in the extern gynæcological department. Clinical lectures and bedside demonstrations are given by members of the staff during both the winter and summer sessions. Students wishing to attend should apply to Dr. H. D. Osborne, 32 Lonsdale Terrace, Belfast, Hon. Secretary to Medical Staff.

Note.—Hospital was rebuilt in 1904 and removed to new premises in Townsend Street. A Resident Surgeon is elected periodically.

* Ulster Hospital for Children and Women, Mountpottinger, Belfast, is the only hospital in the large part of the city situated on the County Down side of the river. It is placed in a working-class district, and has a great field for its charitable operations. There are in the hospital about thirty beds for children and ten for women. There is an extern department for children open every week-day, except Saturday, from 9 till 10, and for women at 10.30, and a special department for diseases of the eye, ear, and throat on Tuesdays and Fridays from 9 till 10. During the summer and winter sessions, clinical instruction is given to students daily, operations being chiefly performed on Wednesday and Thursday. There is a resident midwife for extern work, and every facility is afforded students for attending their cases in the district.

Hospital for Sick Children (Incorporated), Queen Street.—This institution, erected by voluntary donations, and supported by voluntary contributions, was opened for the reception of patients on April 24th, 1879. It consists of a medical ward with twenty-eight beds, and one of a similar size for surgical cases. It is strictly non-sectarian in its principles, and is open to all denominations. Children from birth to the age of 12 years, and not suffering from contagious disease, are admissible as in-patients. A large extern clinic is conducted in the out-patient department between the hours of 9 and 10 a.m., where children from birth to 14 years are attended to. An operating theatre has been found necessary in the extern department, and has been erected. During the winter session systematic courses of lectures and demonstrations in the medical and surgical diseases of infancy and childhood are delivered in the wards on Wednesday and Saturday of each week at 9 a.m. At the close of the session an examination is held, and a gold medal awarded if sufficient merit has been shown. A Convalescent Home is maintained at Carrickfergus, Co. Antrim, in connection with the Hospital.

Ophthalmic Institution and Eye and Ear Hospital, Great Victoria Street, Belfast.—Established 1844. New hospital erected, 1867. Operation theatre added, 1902. New extern department, 1909. This hospital is situated on the main road between Queen's College and the Royal Victoria Hospital. It contains about 30 beds for intern patients, and a large extern department. The latter is open on Monday, Wednesday and Friday at 10 o'clock for eye cases, and on Monday and Thursday at 10 o'clock for ear cases. Special courses of instruction are given during the winter and summer sessions, but students can enter at any time, and can always obtain plenty of practice in ophthalmoscopic work. Full particulars may be had from Dr. Cecil Shaw, 29 University Square, Belfast.

Ulster Eye, Ear, and Throat Hospital.—Established 1871. New hospital opened 1874. 30 beds.

CORK HOSPITALS.

*North Charitable Infirmary.—Established 1774. 110 beds. Special wards for treatment of diseases of women and children. The extern department is largely made use of, and the number of accidents treated is very large. Clinical instruction is given daily from 9.30 a.m. to 12 noon. A new and thoroughly up-to-date operating theatre has recently been added at considerable expense.

Cork South Infirmary and County Hospital.—Founded 1773. The hospital contains 100 beds, available for clinical instruction, 40 medical and 60 surgical. There are also special wards devoted to the treatment of diseases peculiar to women and children, and a large medical and surgical extern department.

Clinical instruction is given daily during the session from 9.30 to 11.30, in both the medical and surgical wards, and clinical lectures are regularly delivered.

Students are regularly instructed in the methods of using the rays by practical demonstration on the cases requiring their use.

For further particulars apply to Norman I. Townsend, hon. sec.

Victoria Hospital for Women and Children.—Established 1874. 70 beds. A large amount of work is done in this hospital to relieve the poor of Cork, Kerry, and other counties.

* County and City of Cork Lying-in Hospital.—Established 1798. 17 beds.

* Eye, Ear, and Throat Hospital, Western Road.—Incorporated 1898. 35 beds. In-patients treated during year, 454; out-patients, 4,238. Clinical Instruction is given during college session. Special demonstrations in the use of the ophthalmoscope, laryngoscope, &c., are given from time to time.

* Fever Hospital and House of Recovery.—Established 1801. 110 beds.

* Maternity.—Established 1872.

* Mercy Hospital.—Established 1857. 80 beds.

GALWAY HOSPITALS.

* County Hospital.—Established 1786. 60 beds.

* No answer to our request for information received from these hospitals.

IRISH PUBLIC SERVICES.

The Poor-law Medical Service.

For several years past the unsatisfactory nature of the Irish Poor Law Medical Service, as a career for young practitioners, has furnished a theme for the opening addresses at the leading medical schools. In addition to the petty annoyances, the laborious and harassing duties, and the ever-increasing amount of clerical work which the new orders of the Local Government Board impose from time to time, the unfortunate medical officers are grievously underpaid, their salaries being totally out of proportion to the duties discharged, and in the majority of rural districts barely sufficent to cover the out-of-pocket expenses, such as are incurred in the keep of a horse and man, and other servants. The Local Government Board has recently laid down, moreover, that the dispensary patients have the first call on the time of the medical officer, and that, even if he is engaged on an urgent private case, he must give it up and go off to attend on a "scarlet-runner," as the dispensary visiting tickets are not inappropriately called. So strictly is he bound to the discharge of his duties that unless incapacitated by sickness or other cause, or with the permission of the guardians expressly granted, he cannot leave his district for a single day, even if he makes provision for the performance of his duties in his absence by a brother practitioner. The Irish Medical Association, whose work includes the safeguarding of the interests and the improvement of the condition of the Poor Law medical officer, considers it an imperative duty to point out to young practitioners the following facts: (1) That the Poor Law Medical Service is one in which there is no promotion. (2) That it is a service where few facilities exist for original research, and still less for further medical culture, especially in the rural districts. (3) That, while medical education has become wider in its requirements, and more costly and difficult to procure, almost the same rate of payment as was given to less educated men forty years ago is still offered, and this, too, at a time when the rural prosperity of the country is less, and consequently lucrative private practice more difficult to obtain. (4) That there is no compulsory superannuation, and, as a consequence, many old and infirm men are forced to remain in the service long after they have become unfit to discharge the duties, seeing nothing but extreme poverty and perhaps the workhouse itself staring them in the face.

We need go no further than to say that the Irish Poor Law Medical Service is in most cases a service to avoid. We therefore strongly urge on young medical men the importance of supporting the interest of the profession and their own, by refraining from applying for vacant posts of which the salary is insufficient.

There are about 160 workhouse and about 810 dispensary medical officers. The salary in this service is said to average about £114, and when it is taken into consideration that in the vast majority of rural districts it is necessary to keep one or more horses, the average area being from forty to sixty square miles, it is plain that there will not be a large margin left from the public emoluments.

The dispensary medical officer is also *ipso facto* the registrar of births, marriages, and deaths, and medical officer of health for the district, under the Public Health Act, passed in 1873 and amended in 1878. The former office, in country districts, yields between £5 and £10 a year, and the emoluments of the latter appointment in very few cases reach £20, averaging about £12. The medical officer is also vaccinator for the locality, and is required to vaccinate everyone who applies. For each patient a fee of 2s. is paid, along with his salary, by the guardians, and the sum total of those fees varies, according to the populousness of the district, from £4 to £100, an average for the provinces being about £10.

Qualifications.—The qualifications required by the Local Government Board are a licence in surgery, in medicine, and in midwifery; but registration in the "Medical Register," if effected since the passing of the Medical Act, in 1886, fulfils all requirements. The candidate must also be 23 years of age. Candidates recently qualified must possess a certificate of competence in vaccination.

Duties.—The duty of the dispensary doctor is twofold. He has to attend his dispensary or dispensaries on a given day or days in the week. He has also to visit at any hour of the day or night a sick person for whose relief a visiting ticket has been issued and to continue his attendance as often as may be necessary to the termination of the case. Moreover, he has many books to keep and a multitude of returns to make, and in most districts he has to make up all the medicines for the poor.

Workhouse Hospitals.—The number of unions in Ireland is 159, to each of which is attached one or more medical officers, appointed and controlled by the board of guardians in the same manner as the dispensary medical officer. The salary is about the same as that of the dispensary doctor, and the duties of a more easy and satisfactory description, inasmuch as they are confined to daily attendance at the workhouse hospitals, and no night visits out of doors or long journeys across the country are involved.

The Irish Lunacy Service.

This service, at present, affords a comfortable livelihood for 22 resident medical superintendents and 32 assistants. The superintendents receive salaries and allowances ranging, according to the number of inmates of the asylum, from £500 to £1,000 a year, and the assistants receive salaries and emoluments averaging about £200 to £300 a year. There are also a few visiting physicians receiving about £120 a year, but this class of officer is being allowed to die out, and no new appointments will be made. The superintendents and assistants must devote their whole time to their duties.

Formerly the appointments of medical superintendents were in the patronage of the Lord Lieutenant, but, under the Local Government Act, they are in the hands of the asylum committees, with the proviso that no one shall be appointed who is not a fully registered practitioner with five years' service as assistant. The assistant is also appointed by the committee. In addition to these officers, there are, in certain larger asylums, clinical residents, who receive about £50 a year and full allowances. These appointments afford excellent introduction to the higher places in the service.

Tuberculosis Service.

Most of the county and county borough councils are proceeding to appoint tuberculosis officers to carry out work under the Tuberculosis Prevention Act (1908) and the National Insurance Act (1911). The duties proposed are usually (1) to act as superintendent of the county sanatorium; (2) to conduct one or more tuberculosis dispensaries; (3) to act as consultant with practitioners in regard to tuberculous patients; (4) to conduct a bacteriological laboratory; (5) to act as adviser to the local insurance committee and the county council in regard to tuberculosis; (6) to organise and conduct anti-tuberculosis work generally in the county or county borough.

The tuberculosis officers must give their whole time to their duties. The salaries offered vary from £350 to £500 a year, with an allowance for expenses. The lower figure must be regarded as quite inadequate, and candidates before applying for such posts should satisfy themselves that the conditions of service have been approved by the local medical profession.

Other Appointments.

There are, in addition to those which we have mentioned, certain appointments open to medical practitioners in special localities. They are:—

(1) Surgeoncies to the county infirmaries. (2) Attendance on the Royal Irish Constabulary. (3) Attendance on the Coastguards. (4) Factory Surgeoncies. (5) Attendance upon the depot soldiers who are not otherwise provided for. (6) Attendance on Postal Officials. (7) Prison Surgeoncies.

In each county is an infirmary or public hospital, to which one or more surgeons are appointed. In most cases the surgeon receives a salary of about £120 a year, and the appointment is in the hands of the infirmary committee, which is nominated by the county council. Some of the recent appointments have been honorary. The position is a pleasant one, and gives scope for modern surgical work. It is considered the best introduction to county consulting work.

The Constabulary are paid for at the rate of 2s. per month for each member of the force on duty in the district, including the wives and children of the men, but not of the officers. This includes the supply of medicines. The appointment to this position rests with the Inspector-General of the Royal Irish Constabulary, who usually acts upon the advice of the local district inspectors as to the convenience of the men, and, of course, the emoluments depend on the number of Constabulary stations and the number of men in each.

The Coastguard Service.—The duty of the medical officer is to attend the men when sick and to examine candidates either for admission or for superannuation. The fees vary from 5s. to 2s. 6d. per visit. The appointments rest with the Admiralty, but are usually secured for the local Poor Law medical officer. The emoluments depend on the number of stations and men, which are now very few.

Factory surgeoncies are in the gift of the Chief Inspector of Factories in Whitehall. There is a set scale of payment by the factory owner to the inspector for this work, but we believe it is not adhered to, and, in some districts, at all events, the emolument is a matter of arrangement. The amount depends upon the size of the factory, the position being, in Dublin or Belfast, or in other large manufacturing centres, a lucrative one, but in other places scarcely worth taking. The attendance on the military depôts is not worth mentioning.

Attendance upon postal servants is badly paid, except in the large towns, and the inspecting and sanitary duties are onerous.

Surgeons to the prisons are appointed by the Lord Lieutenant. The salaries for visiting surgeons vary from about £40 a year to £150. In the larger prisons there are whole-time surgeons.

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Scotland.

In London the hospital is the unit of the medical school; in Scotland medical education is centred round the four Universities. It is not drawing any invidious comparison to say that Edinburgh occupies the premier place among the sister Universities as a medical school. Her long tradition alone justifies the statement. It is true that, as in so many other departments of activity, a levelling-up process has been going on in recent years, and probably there is less difference between the Scottish schools as regards efficiency and the excellence of their teaching than in the past, when Edinburgh stood *hors concours*. It is, therefore, very much a matter of convenience, or of fancy, which University the student seeks. Naturally, to those with no local ties, the prestige attaching to the Edinburgh degree proves attractive, and the number of graduates from overseas who attend the University is proof that its reputation is not declining. In addition to the University degrees, one other qualification to practice can be obtained in Scotland—the joint licences of the Royal College of Physicians, the Royal College of Surgeons, Edinburgh, and the Royal Faculty of Physicians and Surgeons of Glasgow. The standard of examination for the triple qualification (as it is called), though lower than that of the Universities, is yet high enough to test the abilities of the candidates, if one may judge from the number of rejections. The standard, too, is being gradually raised. One characteristic feature of the Scottish medical schools is the existence, side by side with the University, of extra-mural schools, independent in every respect of the University, and recognised by the latter as schools whose classes qualify for graduation. The extra-mural teachers are all hospital physicians or surgeons, or specialists in their various branches; their remuneration depends on their power of attracting students; they are exposed to free competition; they are therefore under the constant necessity of teaching up to their very best, since any slackness is at once followed by a diminution of the students attending their class. The extra-mural school has come through many trials of late. Among these has been the effect of the Carnegie bequest, which has allowed many students, who probably would in the ordinary course of events have attended the extra-mural classes, to become University undergraduates. The proposed introduction by the Universities of a composition fee for the medical curriculum is viewed by the extra-mural lecturers with dislike, because it is feared that if it comes into effect the number of extra-mural students will again decline, and this, to an unendowed school, renders it difficult to maintain the pitch of efficiency demanded by present-day requirements. During the last few years the medical curriculum has been subjected to the most careful scrutiny by various bodies who have personal knowledge of the requirements of the students, and it has undergone, and is still undergoing, great changes for the better. The general interest which has been shown in the curriculum is encouraging to its reformers, and has removed the reproach that Edinburgh was content to rest on the laurels of the past. It may now be said, without fear of contradiction, that the education given in the Scottish schools generally has no need to fear comparisons. Weaknesses exist, of course, but no one is more conscious of these, or more anxious to remedy them, than the teachers. Though the University and extra-mural students do not meet in the class-room, they rub shoulders in the course of their clinical work—hospital, dispensary and maternity. The dispensary system is peculiar to Scotland; what we know as a dispensary differs entirely from a dispensary in the English sense of the word. A dispensary is an out-patient clinic, separate from any hospital, staffed by honorary medical officers, and attended for instruction by students. Not the least important part of the student's curriculum is his attendance for several months on outdoor patients in their own homes under the same conditions as obtain in practice among the lower working classes. University students have the privilege of working under extra- as well as intra-mural teachers, while men going up for the triple qualification are limited to the latter. It is not uncommon, however, for a man to come up intending to take the licence, and to change his mind and go in for a degree, or *vice versâ*, and this can usually be done without much trouble or added expense, provided the change is made early in the course. The maternity training is still a weak spot in the Edinburgh curriculum, and many students are in the habit of going to Dublin or Glasgow for their practical midwifery. Great difficulties apparently stand in the way of making the work in Edinburgh what all its teachers would like—among them the material which is required for training midwives under the new Act—and though amalgamation of various institutions, and the opening of a residency in connection with the maternity hospital, have done something to improve matters, they have, to a certain extent, fallen short of what was hoped. When all is said and done, however, the Scottish graduate or diplomate receives an excellent training in his profession, and it can no longer be said that his course, though good in theoretical subjects, is defective in practical work. Clinical instruction is now having the closest attention directed to it, and systematic lecturing no longer fills the premier place that it once occupied. It is impossible to make any very definite statement as to the relative cost of a medical education in the different schools, as compared with London and Dublin, as so much depends on the extra classes taken out, the mode of living, and so on. The minimum inclusive fees for the licence are £120, for the M.B. degree about £146; but almost every student finds it practically necessary to attend additional classes. On the whole, the cost of living is highest in Edinburgh, lowest in Aberdeen; in the former, while the rent of lodgings is lower than in London, maintenance, including clothing and provisions, is somewhat more expensive. Incidental expenses, amusements, etc., are, however, considerably less in the Northern capital. In Aberdeen, money goes much further than in the south, and the student ought to keep himself on about two-thirds of the funds required in Edinburgh.

THE CARNEGIE TRUST.

Through the munificence of Mr. Andrew Carnegie, LL.D., payment is now made "of the whole or part of the ordinary class fees exigible by the Universities from students of Scottish birth or extraction, and of sixteen years of age or upwards, or scholars who have given two years' attendance, after the age of fourteen years, at State-aided schools in Scotland, or at such other schools and institutions in Scotland as are under the inspection of the Scottish Education Department."

The Trust provides for the payment of the class fees of the above students proceeding to graduation in medicine or science. Application for payment of class fees under the conditions of the Trust should be made to the Secretary, Mr. W. S. McCormick, Merchants' Hall, Edinburgh.

UNIVERSITY OF EDINBURGH.

Four degrees in medicine are granted; Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). The first two must be taken together, the last two may be taken separately.

No one is admitted to the degrees of Bachelor of Medicine and Bachelor of Surgery who has not been engaged in medical study for five years after passing a preliminary examination in general knowledge in accordance with the medical ordinances. A degree in Arts or Science of a British or other recognised University is held to supersede such preliminary examination. The subjects included in this general examination are English, Latin, elementary mathematics, and Greek, or French, or German.

The *annus medicus* of each year is constituted by at least two courses of not less than one hundred lectures each, or by one of such courses, and two courses of not less than fifty lectures each, exclusive of the clinical courses. Two years of the five must be spent at the University, the remaining three years at any other Medical School recognised by the University Court.

During the first four years the student must attend botany, zoology, physics, practical chemistry, practical physiology, practical pathology, and medical jurisprudence during courses of not less than 2½ months each; public health, not less than forty lectures; practical anatomy, during two courses of not less than five months each; chemistry, anatomy, physiology, pathology, surgery, materia medica, medicine and midwifery during courses of not less than five months each. He must attend a course of twenty-five lectures on practical pharmacy, or have dispensed drugs for a period of three months in a recognised hospital or dispensary. He must attend a nine months' course in clinical medicine and in clinical surgery. During the fifth or final year he must be engaged in clinical study for at least nine months. In all, before graduation, he must have done hospital work for at least three years, and have acted as clerk in the medical and surgical wards and attended for six months the practice of a dispensary, or of a physician and surgeon. He must also have studied (1) operative surgery; (2) mental diseases; (3) *post-mortems*, fevers, and diseases of the eye, and (4) one of the following: Diseases of children, of the ear, nose and throat, or of the skin; (5) vaccination; (6) practical anæsthetics.

He must attend at least 25 cases of labour under the superintendence of a registered medical practitioner or 12 such cases, and, for at least three months, the practice of a midwifery hospital.

Each candidate is examined both in writing and *vivâ voce*:—

1. On zoology, botany, physics and chemistry.
2. On anatomy and physiology.
3. On pathology, and materia medica and therapeutics.
4. On medicine, surgery, midwifery, forensic medicine, and public health.

The order of examination (for students beginning in winter) is as follows:—Physics, end of first half of first winter; Chemistry, end of second half of first winter; Zoology and botany, end of first summer; Physiology, end of second summer; Anatomy, end of first half of third winter; Practical materia medica, end of second half of third winter; Pathology, end of third summer; Materia medica, end of second half of fourth winter; Medical jurisprudence and public health, end of fourth summer; Midwifery, Medicine and Surgery, end of fifth winter; Clinical medicine, surgery, and gynæcology, end of fifth summer. An interval of 3 months must elapse between the date of passing the systematic subjects and the date of appearing for the clinical subjects.

The degree of Doctor of Medicine may be conferred on any Bachelor of Medicine and Bachelor of Surgery, and who is of the age of twenty-four years, and who produces a certificate of having been engaged, subsequently to his having received the degree of M.B. and Ch.B., for one year in attendance on a hospital, or in scientific work bearing directly on his profession, or in the military or naval medical services, or for two years in practice other than purely surgical. The candidate shall submit to the Faculty of Medicine a thesis on any branch of knowledge comprised in the professional examinations for the degrees of Bachelor of Medicine and Bachelor in Surgery. The candidate will also be examined in clinical medicine and must show practical acquaintance with advanced methods of diagnosis; he may take gynæcology, mental diseases, or diseases of children for one of his three cases. The degree of M.D. is conferred on holders of the degrees of M.B., C.M. (Old Regulations) on the submission of a thesis approved by the Medical Faculty, provided that the candidate has passed the preliminary examination in the subjects of Greek and logic or moral philosophy. Should the candidate elect to do so, he may, however, take the M.D. degree under the new regulations, *i.e.*, substituting an examination in clinical medicine for that in Greek and logic. This course is usually pursued by those who did not pass in these subjects with the rest of their preliminary examinations.

The regulations for the degree of Ch.M. are very similar.

Fees:—The fee to be paid for the degrees of Bachelor of Medicine and Bachelor of Surgery is twenty-two guineas. The fee for the degree of Doctor of Medicine or of Master of Surgery is ten guineas (Old Regulations, £5 5s.).

The total expense of the curriculum, including examination and matriculation fee, is about £146.

Among scholarships, &c., open for competition during the session 1912-13 are the following:—Vans. Dunlop scholarships value £100, in preliminary subjects; Buchanan scholarship in midwifery, value £40; Mouat scholarship in practice of physic, £57; Allan Fellowship in clinical medicine and surgery, £55. There are also a great many other bursaries. Fellowships and prizes open during the session of 1912-13 and for the details governing entry for these the University Calendar (James Thin, South Bridge, Edinburgh) should be referred to.

Graduation in Public Health.—Degrees (B.Sc. and D.Sc.) are also conferred in Public Health. Candidates must be graduates in medicine and must matriculate for the year in which they proceed for examination. They must (1) have worked at least twenty hours a week during a period of eight months in a recognised Public Health laboratory—five of these months must be spent consecutively in the Public Health Laboratory of the University of Edinburgh; and (2) have attended a course of lectures on physics in addition to that qualifying for graduation in medicine, and one on geology.

Candidates for the second examination are not admitted until eighteen months have elapsed after having passed M.B., Ch.B., or sooner than six months after the first examination. They must have attended two courses of Public Health, one dealing with medicine, the other with engineering in relation to public health. They must also have studied practical sanitary work under a Medical Officer of Health for six months, have had three months' instruction in a fever hospital, and three months' instruction in mensuration and drawing.

Fees for Science Degrees: B.Sc., first examination, £3 3s.; B.Sc., second examination, £3 3s.

Diploma of Tropical Medicine.—Every year an increasing number of candidates avail themselves of the University Diploma of Tropical Medicine and Hygiene, which is conferred only on those possessing a degree in medicine. The course includes practical bacteriology, tropical diseases and hygiene, the zoological character and life history of disease-carrying insects and venomous animals, clinical instruction at an hospital for tropical diseases. The examination is held in January and July, the fee being £4 4s. A special certificate in Tropical Diseases is also granted under less stringent regulations, and after a shorter course.

Diploma in Psychiatry.—The course of study extends over one year, during which candidates must attend classes on (1) Anatomy and (2) Physiology of nervous system, (3) Pathology, (4) Bacteriology in relation to nervous system, (5) Psychology, (6) Clinical Neurology, (7) Psychiatry, (8), Clinical Psychiatry. There are two examinations, one on anatomy, physiology, pathology and bacteriology; the second on the remaining subjects. The fees amount to about thirty-seven guineas.

University Hall, Edinburgh.—In an educational number it is worth while calling attention to the advantages offered to students coming to Edinburgh to study, in the shape of social residences, in which students can live in a self-governing community. In each house there are private studies with or without bedrooms, and common sitting and dining rooms. The charges vary from 7s. 6d. to 22s. 6d. per week. The residents elect a treasurer from among their number who acts as intermediary between them and the housekeeper or servants. It is a satisfactory indication of the comfort of the Hall that many graduates live in it and are willing to help or coach the undergraduates for moderate fees. To gain admission two references must be produced from past or present residents, or other suitable person. These are considered and voted on at a house meeting. The Hall is an admirable place for parents to send their sons to. Any unruly member may be expelled by a meeting of the residents similar to that held for elective purposes.

Medical School for Women.—Classes for women are carried on in the College of Surgeons and the New School, by Lecturers recognised by the University.

Information may be obtained, on application to the Dean, School of Medicine of the Royal Colleges, College of Surgeons, Edinburgh. Session begins October 1st, 1912. The classes qualify both for the Edinburgh University degree and for the Licence of the Triple Board, and are for women alone. The University of Edinburgh does not recognise certificates presented by female candidates for mixed classes without special cause shown. Women students are eligible for the benefits of the Carnegie Bequest.

UNIVERSITY OF GLASGOW.

The University of Glasgow is both a teaching and an examining body, but admits to examination only those candidates whose course conforms to its own regulations. Within certain limits provision is made for accepting instruction given by recognised medical schools and teachers; but not less than one half of the subjects other than clinical must be taken in this or some other recognised University entitled to confer the degree of M.D., and at least two years of the course must be taken in Glasgow University. Four degrees, open both to men and to women, are conferred—M.B. and Ch.B. (always conjointly), M.D. and Ch.M. A preliminary examination must be passed in (1) English, (2) Latin, (3) Mathematics, and (4) an Additional Language, namely, Greek, French, German, Italian, or other approved language, with possible option to students whose native tongue is not English in the case of the fourth subject, and, on passing, students must register in the books of the General Medical Council. For M.B. and Ch.B. a curriculum of five years is required. A syllabus with full details of the curriculum and of the preliminary examination may be had, post free, on application to the Registrar.

The fees for M.B. and Ch.B. are £23 2s.; for M.D. £15 15s., and for Ch.M. £15 15s. For hospital attendance there is an initial fee of £10 10s., with a further fee of £3 3s. for each winter session, and £2 2s. for each summer session, of clinical instruction. There are three very extensive general hospitals in the city, which afford exceptional opportunities for clinical work, while the Royal and other asylums, the City Fever Hospitals, the Maternity Hospital, the Sick Children's Hospital, the Eye Infirmary, &c., give facilities for the study of special branches.

The degrees of B.Sc. and D.Sc. in Public Health and of B.Sc. in Pharmacy, are also now conferred. Of late the University has made considerable efforts to extend its laboratory accommodation and equipment, to augment its teaching staff, and to encourage post-graduate and research work. Within recent years there have been provided new laboratories in the departments of pathology, anatomy (costing £13,000), chemistry, and surgery (costing £9,900); while new laboratories, to cost, with equipment, upwards of £50,000, have been erected for the departments of physiology, materia medica, and medical jurisprudence and public health.

Bursaries and prizes to the annual amount of about £1,000 are appropriated to medical students, including an Arthur bursary for women, £20 for three years.

Several bursaries open to students in any faculty are not infrequently held by medical students, and Scholarships and Fellowships to the annual amount of £1,600 may be held by medical students who have gone through the Arts course.

Queen Margaret College for Women. — Founded in 1883 (by the Glasgow Association for the Higher Education of Women, which was formed in 1877 with the object of bringing University instruction, or its equivalent, within the reach of women), Queen Margaret College in 1890 added to its faculty of Arts a School of Medicine for Women. This was organised entirely on University lines, and with the view of preparing for University degrees; and when, in 1892, in consequence of the Ordinance of the University Commissioners authorising the Scottish Universities to admit women to instruction and graduation, Queen Margaret College became the Women's Department of the University of Glasgow, its classes in medicine taken previously to its incorporation with the University were recognised as preparing for the degree. A full course of study for M.B. and Ch.B. is given by University professors and lecturers, with excellent facilities for hospital and dispensary work in the Royal Infirmary and other hospitals. A Hall of Residence for the students was founded in 1894. Fees for the classes at Queen Margaret College may be paid by the Carnegie Trustees; and several bursaries are open to women students of medicine.

The Winter Session begins on 14th October. The prospectus can be obtained from the Mistress, Miss Melville, Queen Margaret College, Glasgow.

UNIVERSITY OF ABERDEEN.

The University of Aberdeen possesses under its charters the amplest privileges claimed or enjoyed by any academical institution. It confers degrees in the five faculties of Arts, Science, Divinity, Law, and Medicine. It also grants diplomas in Public Health, Agriculture, and in Education. It is, moreover, a teaching body equipped with twelve distinct chairs in the various branches of medicine and surgery. The majority of the professors devote their whole time to the work of the chairs. There are fully-equipped laboratories, the accommodation for which has recently undergone considerable extension. The degrees of M.B. and Ch.B. are conferred together; they cannot be obtained separately. The curriculum of study is nearly the same as in the University of Glasgow; the regulations in the preceding columns will therefore apply here. Two years must be passed at Aberdeen. With regard to fees, each candidate for the degrees of M.B. and Ch.B. must pay a fee of £5 5s. in respect of each of the first three professional examinations, and £7 7s. for the final examination. Total cost, exclusive of the fees for degrees, is about £120. Besides the Royal Infirmary, students have the opportunity of attending several other local institutions where special courses of instruction are given. Perpetual fee for hospital practice is only £6. The professional examinations are held twice in each year, namely, in March and July, directly after the close of the winter and summer sessions.

Bursaries.—Bursaries, Scholarships, and Fellowships to the number of fifty, and of the annual value of over £1,180, may be held by students of medicine. (See "University Calendar.")

The Degree of M.D.—The degree of Doctor of Medicine may be conferred on any candidate who has obtained the degrees of M.B. and Ch.B., is of the age of twenty-four years, and has been engaged subsequently to his having received the degree of M.B. for one year in attendance in a hospital, or in scientific research bearing on his profession, or in military or naval medical service, or for two years in medical practice, and has presented a thesis which has been approved of by the Medical Faculty. Candidates are required to pass an examination in clinical medicine in addition to presenting a thesis. Similar regulations apply to a degree of Ch.M. (Master of Surgery).

A Diploma in Public Health is conferred after examination on graduates in medicine in any University in the United Kingdom. Regulations may be seen in the "Calendar," or obtained on application to the Secretary of the University.

Aberdeen Royal Infirmary.—This is a well-equipped institution, containing 250 beds, and affords excellent opportunities for clinical study to students at the Aberdeen University. The city, moreover, offers inducement in the way of cheaper living and comparative quiet to that obtained in Edinburgh and Glasgow, and will doubtless be preferred by some on this account.

ST. ANDREWS UNIVERSITY.

United College, St. Andrews, and University College, Dundee.

This University (session opens October 14th) grants the degrees of M.B., Ch.B., M.D., and Ch.M. The degrees of the University are open to either sex. For the degree of M.B., Ch.B., two of the five years of medical study must be spent in the University of St. Andrews ; the remaining three may be spent in any University of the United Kingdom, or in any foreign, Indian, or Colonial University recognised for the purpose by the University Court, or in such medical schools or under such teachers as may be recognised for the purpose by the University Court. The preliminary examination and the professional examinations are of the same character as in the other Scottish Universities. A Diploma in Public Health is also granted by the University of St. Andrews to graduates in medicine of any University in the United Kingdom. Twelve months must elapse between the date of graduating in medicine and entering for the examinations for the diploma. The course of study required consists of (1) a six months' course of practical chemistry, bacteriology, and the pathology of diseases transmissible from animals to man in a laboratory of the University of St. Andrews ; (2) six months' work with a medical officer of health ; (3) three months' clinical instruction in infectious diseases. Subjects for first examination :—Chemistry, physics, bacteriology, and meteorology. Second examination :—Sanitation, sanitary law, vital statistics, medicine in relation to public health.

University College, Dundee, was affiliated and made to form part of the University of St. Andrews in 1897, and the whole medical curriculum may be taken at the medical school of that College. The United College, St. Andrews, offers classes for the first two years of professional study.

Bursaries and Scholarships.

United College, St. Andrews.—Nine Taylour Thomson bursaries for women, of the annual value of from £15 to £25 each—tenable for three years—preference to women medical students. Two Malcolm bursaries of the value of £25 each, tenable by men or women, for five years. Seventeen additional bursaries, including two of £50, one of £40, one of £30, six of £20, one of £15, and six of £10, are open to competition by students of medicine, arts, or science.

University College, Dundee.—Twelve entrance bursaries of the value of £15 each, and fourteen second and third year's bursaries of the value of £20 and £15 are open to competition. Two fourth and two fifth year's bursaries of £20 each are open to students who take the complete curriculum in Dundee. These are all tenable for one year. Other bursaries, of which the patronage is vested in trustees, are available.

The fees for the complete course, exclusive of the examination fees, amount to about £130.

Preliminary Examination.—The preliminary examination in Medicine will take place at the United College, St. Andrews, on September 13th, 14th, 16th, 17th, and 18th. Each candidate must apply to the Secretary for a schedule, to be filled up and returned not later than August 31st. The subjects of examination are: English, Latin, Elementary Mathematics, and Greek, or French or German, and the fee is half-a-guinea.

Fees.—Clinical medicine and clinical surgery, £4 4s. winter session ; clinical medicine and clinical surgery, £3 3s. summer session ; clinical obstetrics, £3 3s. winter session ; £2 2s. summer session.

Fees for Degrees.—Total fees for M.B., Ch.B., are the same as at other Scottish Universities—*i.e.*, 22 guineas (payable in instalments). Fee for the degree of M.D., and also for that of Ch.M., is 10 guineas in each case. For the Diploma of Public Health examinations the fee is £5 5s. for each of the two examinations.

Class Fees.—The fee payable in each of the following classes is 4 guineas, *viz :*—Chemistry, physics, zoology, botany, physiology, anatomy, materia medica, pathology, forensic medicine, and public health, medicine, surgery, and midwifery. The fee for the practical classes in these subjects is 3 guineas each. In clinical surgery and clinical medicine, the fee is £4 4s. ; ophthalmology, diseases of the throat, nose, and ear, diseases of the skin, and mental diseases, the class fees are 2 guineas each. The fee for Public Health chemistry required for the D.P.H. is 7 guineas. A special class in Bacteriology is also held for the D.P.H. for which the fee is 3 guineas.

Dundee District Asylum.—The appointments include two qualified resident assistants and two resident clinical clerks. Clinical instruction is given.

Dundee Royal Infirmary.—Clinical instruction is given at the Infirmary which contains 400 beds, with an annual average number of over 4,000 in-patients, and an annual daily residence of 280, with special wards for maternity cases, diseases of women, diseases of children, diseases of the eye, diseases of the ear, throat and nose, cancer, incipient insanity, and for cases requiring electric treatment. Five resident qualified assistants and an outdoor obstetric assistant are appointed annually. Clinical clerks and dressers are attached to the physicians and surgeons, and students are appointed to assist in the post-mortem room. The instruction given at the Infirmary is recognised for purposes of graduation by the Scotch Universities, the University of London, the University of Cambridge, the Royal University of Ireland, and by the Royal Colleges of England and Scotland. Hospital Tickets for the Infirmary, £2 2s. each session, or £3 3s. a year. Perpetual, £10 in one payment, or £10 10s. by instalments.

Further information will be found in the Calendar of the University published by Messrs. Blackwood and Sons, Edinburgh, the "Calendar of University College," Dundee (obtainable from the Secretary), or can be had from the Dean of the Medical Faculty, Professor J. A. Kynoch.

THE COLLEGES.

The Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Royal Faculty of Physicians and Surgeons of Glasgow have arrangements by which the student may obtain the diploma of the co-operating bodies, and can register three diplomas under the Medical Acts—*viz.*, Licentiate of the Royal College of Physicians of Edinburgh, Licentiate of the Royal College of Surgeons of Edinburgh, and Licentiate of the Faculty of Physicians and Surgeons of Glasgow.

The three bodies grant their *single* qualifications only to candidates who are already registered as possessing another and opposite qualification in medicine and surgery as the case may be.

Regulations of the Conjoint Board of the Royal College of Physicians of Edinburgh and the Royal College of Surgeons of Edinburgh and the Royal Faculty of Physicians and Surgeons, Glasgow.—The candidate must produce certificates of having attended the following course of lectures, the certificate distinguishing the sessions and the schools in which the courses were attended. Anatomy, six months ; practical anatomy, twelve months ; chemistry, six months ; practical chemistry, three months ; materia medica, three months ; physiology, six months ; medicine, six months ; clinical medicine, nine months ; surgery, six months ; clinical surgery, nine months ; midwifery, three months ; medical jurisprudence, three months ; pathology, three months. The candidates must also produce the following certificates :—(*a*) Of having attended six cases of labour under the superintendence of a registered practitioner. (*b*) Of having attended for three months' instruction in practical pharmacy. The teacher must be a member of the Pharmaceutical Society of Great Britain, or the Superintendent of a laboratory of a public hospital or dispensary, or a registered practitioner, or a teacher to a class of practical pharmacy. (*c*) Of having attended for twenty-four months the medical and surgical practice of a hospital, containing eighty patients, and possessing distinct staffs of physicians and surgeons. (*d*) Of having attended for six months the practice of a public dispensary, or of having assisted for six months a registered practitioner. (*e*) Of having been instructed in vaccination.

First Examination, Fee £5.—The First examination shall embrace chemistry, physics, and elementary biology, and shall take place not sooner than the end of the first year, including a winter and summer session. Candidates who desire to enter for the first professional examination must produce certificates of attendance on chemistry, practical chemistry, anatomy, and six months' practical anatomy.

Second Examination, Fee £5.—The Second examination embraces anatomy and physiology and shall not take place before the termination of the summer session of the second year of study. Candidates must produce certificates of attendance on anatomy, practical anatomy, and physiology.

Third Examination, Fee £5.—Comprises the subjects of pathology, materia medica, and pharmacology and advanced anatomy.

Final Examination, Fee £15.—The Final examination embraces medicine (including therapeutics and medical anatomy, clinical medicine); surgery (including surgical anatomy and surgical pathology); clinical surgery; midwifery and gynæcology, medical jurisprudence and hygiene; and shall not take place before the termination of the full period of study.

Subjects of Preliminary Education: (1) English grammar and composition; (2) Latin, grammar, translation from specific authors and easy unseen translation; (3) (*a*) arithmetic, to vulgar and decimal fractions; (*b*) algebra, to simple equations; (*c*) geometry, to the first two books of Euclid; (4) elementary mechanics of solids and fluids, comprising the elements of statics, dynamics, and hydrostatics; (5) one of the following:—(*a*) Greek; (*b*) French; (*c*) German; (*d*) Italian; (*e*) any other modern language; (*f*) logic; (*g*) botany; (*h*) zoology; (*i*) elementary chemistry.

Qualification in Public Health.—The College of Physicians, in association with the Royal College of Surgeons of Edinburgh and the Royal Faculty of Physicians and Surgeons of Glasgow, confers a certificate of competency in public health. The examinations are held in April and October. Fee, £10 10s.

For the special regulations of the Royal College of Surgeons of Edinburgh, intending candidates should apply to Mr. James Robertson, 48 George Square, Edinburgh; and for those of the Royal College of Physicians, to the Secretary.

The Fellowship of the Royal College of Physicians of Edinburgh is conferred only by election, and the candidate must have been a member of the college for at least three years, and have attained the age of twenty-seven years.

The Membership is conferred only on a licentiate of a college of physicians or graduate in medicine of a British or Irish University, provided he shall have attained the age of twenty-four years and shall have passed an examination on: (1) medicine, including therapeutics; (2) on one of the following optional subjects, *in which a high standard of proficiency is expected*:—(*a*) a department of medicine specially professed; (*b*) psychological medicine; (*c*) pathology; (*d*) medical jurisprudence; (*e*) public health; (*f*) midwifery; (*g*) gynæcology. The examination is of a searching character.

The fee for membership is 35 guineas, for fellowship 38 guineas, with a stamp duty of £25—£101 13s. in all.

The licence, or single qualification in medicine, is conferred on candidates who already possess a recognised qualification in surgery. The examinations for this licence are held on the first Wednesday of each month, save those of September and October, in medicine, materia medica, midwifery and medical jurisprudence. The fee is £15 15s., and intending candidates should communicate with the Secretary of the College at least eight days before the date of examination.

The Fellowship of the Royal College of Surgeons of Edinburgh is conferred (except under certain conditions as to age and professional standing) only on candidates who have passed a special examination, and have previously obtained a diploma from the college, or from either of the Colleges of Surgeons of England or Ireland, or the Royal Faculty of Physicians and Surgeons of Glasgow, or the surgical degrees of the Universities of Great Britain, and who are twenty-five years of age. The subjects for examination for those who are already Licentiates of the College are on the principles and practice of surgery, clinical and operative surgery, and one optional subject.

Those who are not Licentiates of this College: on principles and practice of surgery, clinical and operative surgery, surgical anatomy, and one optional subject; and in such supplementary subjects as have not, in an adequate manner, been included in the examination for the registrable surgical qualification possessed by such candidates, and which are required in the examination for Licentiates of this College.

The optional subjects shall embrace: (*a*) Surgery, special branches; (*b*) advanced anatomy and physiology; (*c*) surgical pathology and morbid anatomy; (*d*) midwifery and gynæcological medicine and surgery; (*e*) medical jurisprudence and hygiene; (*f*) practice of medicine and therapeutics. The examinations are written, oral, and practical. Three weeks' notice must be given to Mr. James Robertson, from whom full particulars as to certificates required may be obtained. The fee is £30 for those who hold the diploma of Licentiate of the College, and £45 to others (no stamp duty is payable on the diploma). Registered practitioners, aged not less than 40, who have been in practice for not less than ten years, and who have highly distinguished themselves by original investigations, may under special circumstances be elected without examination. Women are not admitted to the Fellowship of either college.

Licence.—The examination embraces the principles and practice of surgery (including operative surgery and surgical pathology), clinical surgery, and surgical anatomy, and shall not take place before the termination of the full period of study. Fee, £15 15s.

Dental Diploma.—Every candidate for the dental diploma must have attended the general lectures and courses of instruction required at a University or an established medical or dental school recognised by the College as qualifying for the diploma in surgery. The fee is £10 10s.

Edinburgh Royal Infirmary.—Clinical instruction is afforded at this institution, which contains 900 beds under the supervision of professors of the University and the ordinary physicians and surgeons of the Infirmary. Special instruction is given on diseases of women, physical diagnosis, diseases of the skin, eye, ear, throat and teeth, and anæsthetics. Separate wards are devoted to venereal diseases, diseases of women, diseases of the eye, also to cases of incidental delirium or insanity, and three wards are specially set apart for clinical instruction to women students. Post-mortem examinations are conducted in the anatomical theatre by the pathologists. The perpetual fee, on one payment, £12; the annual fee, £6 6s.; half-yearly, £4 4s.; quarterly, £2 2s.; monthly, £1 1s. Separate tickets amounting to £12 12s. entitle the student to a perpetual ticket. No fees are payable for any surgical or medical appointment.

The appointments are as follow:—

1. Resident physicians and surgeons are appointed and live in the house free of charge. There is no salary. The appointment is for six months.

2. Non-resident physicians and surgeons (in the special subjects and for out-patient work) are appointed for six months. These appointments may be renewed.

3. Clerks and dressers are appointed by the surgeons and physicians. These are open to all students and junior physicians holding hospital tickets.

4. Assistants in the pathological department are appointed by the pathologists to conduct post-mortem examinations in the anatomical theatre.

Royal Hospital for Sick Children.—During the year three courses of clinical instruction are given by the staff of the hospital, who are recognised as University Lecturers on the subject. The course consists of clinical lectures, ward cliniques, attendance at *post mortems* and out-patient cliniques. Hospital tickets, £1 1s.

SCHOOL OF MEDICINE OF THE ROYAL COLLEGES, EDINBURGH.

The government of this school, established in 1505, is now vested in a board which is equally representative of the two Royal Colleges and the Lecturers, the school being styled "The School of Medicine of the Royal Colleges, Edinburgh." The present number of lecturers is about sixty, of whom the greater number deliver qualifying courses of instruction of the same duration and scope as those delivered within the University, while a large number of non-qualifying courses on special subjects of interest to medical science, but which are not required for graduation, are delivered both in the winter and summer sessions. The students who attend the classes of the School of Medicine are largely students proceeding to the University degree, as well as those who are intending to take other qualifications, such as the triple qualification of the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Royal Faculty of Physicians and Surgeons of Glasgow; that of the Royal College of Physicians of London, and the Royal College of Surgeons of England, and the degrees of the different Universities. The number of students attending the school averages 1,300 annually. For particulars apply to the Dean of the School, 11 Bristo Place, Edinburgh.

The minimum cost of the education in the School of Medicine for the triple qualification of physician and surgeon from the Royal Colleges of Physicians and Surgeons of Edinburgh and the Royal Faculty of Physicians and Surgeons of Glasgow, including the fees for the joint examinations, is about £120, which is payable by yearly instalments during the period of study.

The Winter Session opens October 8th.

GLASGOW EXTRA-MURAL SCHOOL.

St. Mungo's College and Glasgow Royal Infirmary.—This college was incorporated in 1889 under its present title, being formerly known as the Glasgow Royal Infirmary School of Medicine. The Medical Faculty occupies buildings erected for the purpose of the medical school in the grounds of the hospital. The college is equipped with a complete electric light installation, and a powerful electric educational lantern. Attendance on the classes in St. Mungo's College qualifies for the medical degrees of the Universities and the medical and surgical colleges in accordance with their regulations. A syllabus, giving details as to classes, fees, &c., may be had on application to the Secretary of the Medical Faculty.

The Royal Infirmary, which is at the service of the College for teaching purposes, is one of the largest general hospitals in the kingdom. It has 600 beds available for clinical instruction, in addition to an ophthalmic department, and it has special wards for diseases peculiar to women, venereal diseases, burns, and diseases of the throat, nose, and ear. At the dispensary special advice and treatment are given in diseases of the eye, ear, teeth, and skin, in addition to the large and varied number of ordinary medical and surgical cases which in a great industrial centre daily require attention. Students at the college and hospital get the benefit of dispensary experience free of charge, and no better or wider field for seeing hospital practice and receiving clinical experience can be found than in the Glasgow Royal Infirmary.

Appointments.—All appointments are open. There are five physicians' and ten surgeons' assistants, who obtain free board and residence in the hospital and act in the capacity of house physicians and house surgeons. There is also a house surgeon for the ophthalmic department. These appointments are made for six months, and are open to gentlemen who have a legal qualification in medicine and surgery. Clerks and dressers are appointed by the visiting physicians and surgeons. From the large number of cases of acute diseases and accidents of varied character received, these appointments are valuable to students. Assistants are also appointed for the pathological department.

Fees.—The fees for Lectures, including hospital attendance necessary for candidates for the Diplomas of the English, Scotch, and Irish Colleges of Physicians and Surgeons, amount to about £80.

Royal Infirmary.—Fees: (1) Hospital attendance, dispensary, &c., perpetual ticket, £7; season ticket, six months, £2 2s.; three months, £1 1s. Separate payments amounting to £7 7s. entitle a student to a perpetual ticket on returning previous season tickets. (2) Clinical instruction, six months, £3 10s.; three months, £1 15s.

Dental Curriculum.—Students studying with a view to the dental diploma can obtain instruction in the following subjects: Physics, chemistry, anatomy, physiology, surgery, practice of medicine, and materia medica. The special dental courses may be obtained in the Dental School, 15 Dalhousie Street, Glasgow. Particulars may be had from D. M. Alexander, Esq., 97 West Regent Street.

Anderson's College Medical School, Glasgow.—Founded in 1800. The modern, excellently equipped buildings of this school are situated to the west of the entrance to the Western Infirmary, and within four minutes' walk of the University. Extensive laboratory accommodation is provided for practical anatomy, practical chemistry, practical botany, practical zoology, practical physiology, practical pharmacy, operative surgery and public health.

The various courses of instruction qualify for all the Licensing Boards in the United Kingdom, and for the Universities of London, Durham, Edinburgh, and Glasgow, under conditions stated in the calendars. The courses in public health (laboratory and lectures) are also recognised by the Universities of Cambridge, London, etc. Session opens 14th October, 1912. For syllabus, apply to the Secretary of the Medical Faculty, Anderson's College Medical School, Glasgow, W.

The Carnegie Trust pays the fees of students at Anderson's College on conditions regarding which particulars may be obtained from Sir W. S. McCormick, LL.D., Carnegie Trust Offices, Edinburgh.

Class Fees.—For each course of lectures (anatomy, ophthalmic medicine and surgery, aural surgery, diseases of throat and nose, mental diseases, and public health excepted), first session, £2 2s.; second session (in Anderson's College), £1 1s. For practical classes (except anatomy, chemistry, and public health), namely, botany, zoology, physiology, pharmacy, operative surgery, first session, £2 2s.; second session, £2 2s. *Chemistry.*—Lectures, £2 2s.; practical chemistry, £3 3s. *Botany and Zoology.*—Reduced fees for lectures with laboratory work in botany or in zoology, during same summer session, £3 3s.; for lecture class or practical class separately, in botany or in zoology, £2 2s. *Ophthalmic Medicine and Surgery* (including hospital practice), aural surgery, diseases of throat and nose, and mental diseases, fee for each course, £1 1s. *Anatomy Class Fees.*—Winter.—First session, lectures and practical anatomy, £5 5s.; practical anatomy alone, £2 2s. Second session, lectures and practical anatomy, £4 4s.; practical anatomy alone, £2 2s. Summer.—Regional course or special dental course (each including nervous system) and practical anatomy, £3 3s.; regional anatomy course or special dental course alone, £2 2s.; practical anatomy alone, £1 11s. 6d.; osteology and practical anatomy, £2 12s. 6d.; osteology alone, £1 11s. 6d. *Public Health Laboratory.*—Fee for six months' course £12 12s. *Matriculation Fee.*—For the year, 10s.; for one class alone in winter, 5s.; for summer session alone, 5s.

Western Medical School, Glasgow.—Situated in University Avenue, opposite the principal entrance to the University, this School is also near the Western Infirmary. The subjects taught are chemistry, anatomy, medicine, surgery, midwifery and gynæcology, ophthalmology and dermatology. Some of the classes qualify for graduation and for Scottish diplomas. The fee for most of the subjects is £2 2s.

There is no matriculation fee. Further particulars may be learnt from the Secretary, Mr. I. N. Morton.

Glasgow Maternity and Women's Hospital.—This institution is of ancient foundation, but the present buildings, containing 104 beds, with a large out-patient department, were only opened four years ago. Erected with due regard for the most modern requirements, and staffed by physicians of reputation, it affords excellent facilities for acquiring a complete knowledge of the art and practice of obstetrics. There is also a students' residence in connection with the hospital, in which board and residence can be had at very moderate fees. The hospital fee is £5 5s. Full particulars from House Superintendent.

Glasgow can boast of several other important medical institutions, such as the Western Infirmary, with a staff representative of the best in medicine and surgery of the second city of the Empire, and having no fewer than 500 beds. There is also the Victoria Infirmary, with 260 beds, in which leading specialities, such as ophthalmology, aural surgery, diseases of the throat, diseases of women, diseases of the skin, etc., are taught; the Glasgow Eye Infirmary, with 100 beds; the Royal Hospital for Sick Children, with 74 beds, etc.

(END OF EDUCATIONAL NUMBER.)

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Sept. 7th, 1912.

THE GLANDS OF INTERNAL SECRETION.

The researches of modern physiology have proved that certain vascular organs—as the thyroid, pituitary, ovaries, testicles, supra-renal capsules—are endowed with an internal secretion essentially necessary to the economy. Thus the total ablation or destruction of these endocrine glands is followed by the death of the animal in a very short time, accompanied by diverse phenomena, as convulsive movements, paralysis of the lower limbs, puffiness of the eyelids, hypothemia, dyspnœa, etc. The effect of the ablation of the thyroid body in man consists in general puffiness of the tegument. The skin is the seat of hard, elastic pseudo-œdema, uninfluenced by pressure of the finger; at the same time it is dry, rough and pale, while the hairs become fragile and fall in abundance.

The repartition of the pseudo-œdema produces a modification of the facies and the external habitus—swelling of the eyelids, tumefaction of the tongue, enlargement of the nose, thickening of the lips, general deformity of expression, giving to the face an aspect of stupidity and indolence. In the child may be added an arrest of the development of the skeleton.

In the functional point of view, the nervous system is particularly affected. Intelligence diminishes in the child, education is slow and almost impossible, and to this intellectual apathy is added physical apathy characterised by general indolence in the movements.

In 1884 Schiff assured having obtained different results according as he practised thyroidectomy on dogs or rabbits, the operation causing the death of the dogs, while the rabbits survived. These results provoked researches which completed the anatomical notions relative to the thyroid body. It was perceived that to the thyroid gland were annexed small organs of extremely reduced dimensions, to which the name of parathyroid gland was given, and in 1891 Glegg proved that the death of the rabbit was produced by the removal of these little organs as well as the thyroid gland. Hence ablation of the thyroid gland alone is consistent with life, but not so when the whole thyroid system is removed.

Later researches tend to attribute to a trouble in the function of the parathyroids infantile tetany, puerperal eclampsia, and Parkinson's disease.

Ablation or destruction in animals of the supra-renal capsules provoked rapid wastings, asthenia, lowering of the arterial pressure, acceleration of the heart, and death followed in 19 to 29 days; pigmentation was never observed. All these symptoms are present in a modified form in Addison's disease.

Ablation of the ovaries during the active period of life is followed by atrophy of the breasts, obesity, heat waves, congestive phenomena, bearing principally on the lungs, headache, vertigo, palpitations, neurasthenia.

Ablation of the testicles is too well known to need repetition, for the somatic and physiological modifications have been observed from time immemorial in eunuchs.

Castration in the dog determines atrophy of the prostate. It was on this fact that was founded some years ago a method of treatment of hypertrophy of the prostate, a method now completely abandoned. The results obtained on animals by grafting the thyroid gland directed the physiological researches on the *rôle* of sanguineous vascular glands.

From the fact that thyroidectomy lost its dangers in animals on which was grafted a thyroid gland of another animal of the same species, it was permitted to conclude that it was by a product of internal secretion that the grafted gland warded off the dangers of thyroidectomy; that this product was contained in the juice or extract of the gland; and lastly that the injection or ingestion of this juice or extract would have similar and more permanent effects than that of the graft, which finishes by being absorbed or is transformed into a fibrous mass, deprived of all vitality. According to Sauvé, the grafted portion can never re-establish the internal secretion of the gland, and hence its inutility.

Of the two methods, injection or ingestion of the extract of the thyroid gland, ingestion should be preferred, and the same might be said of the other glands, except, perhaps, as regards the supra-renal capsules, of which the active principle, adrenaline, is well known since the discovery of takanine.

Injections of the capsular extract provoke an increase of the arterial tension, produce mydriasis, glycosuria, and improve the condition of rickets or osteomalacia.

Ingestion of the extract of the pituitary gland raises the arterial tension, slows down the pulse, increases diuresis, suppresses disagreeable sensations of heat and sudation, improves the appetite and sleep, exercises on the nutrition as well as on the osseous and muscular development a stimulating action.

Ingestion of fresh ovaries increases the strength of certain asthenic women, and possesses a dynamogenic action similar to that of the testicle.

Injection or ingestion of juice of the testicles of animals was introduced into the medical world by Brown-Séquard, who made known its dynamogenic action, both physical and physio-psychic.

All of these glands possess evidently an antitoxic action, for the troubles following the ablation or destruction might be compared with those provoked by the introduction of different poisons into the organism. Hence it is rational to admit that the endogenic poisons resulting from the normal function of the ecomony are neutralised by the product of secretions.

Positive proofs of this antitoxic action are not as yet obtainable, but it may be inferred from the fact that serum of animals subjected to ablation of a gland is toxic, and the curative effect of an injection of an extract in an animal from which the corresponding gland had been removed, and finally the defensive reaction of glands consecutive to infections or intoxications manifested by the histological aspects of the gland, revealing hyper-function due to an increase in the product of internal secretion capable of neutralising the toxines directly or indirectly introduced into the organism. (Gley.)

GERMANY.

Berlin, Sept. 7th, 1912.

At the Medizinische Gesellschaft, Hr. Goldmann gave a note on

CLOSURE OF THE ABDOMEN AFTER SIMPLE CHOLECYSTECTOMY.

He said that in the great majority of patients who came under treatment for gall-stones, the affection was limited to the gall-bladder. It was sufficient in such cases to do a simple cholecystectomy without opening the common bile duct at all. Instead of tampons and drainage in the majority of such cases the abdomen could be closed at once, as was already practised by a number of surgeons.

He would demonstrate a modification that had been practised by Professor Rotter for four years, one partly built up on observations made in acute inflammations of the cæcum.

Professor Rotter had determined that after operation for appendicitis, even when there had been diffuse peritonitis the abdomen could be closed at once if three indispensable conditions were present—there must be no defect of peritoneum, no gangrenous spot must be left behind, or in which any suppurative infiltration was present, and, lastly, the hæmorrhage must have been effectually stopped. In this case, when there could no longer be place for any secretion in the abdominal cavity the abdomen could be closed at once without drainage or tampons that rendered recovery so lingering.

He had also shown that drainage of the abdomen could only be effective for a very short time at most; adhesions soon formed even in a few hours that arrested all drainage.

Tampons had a similar effect, the part so treated at once became practically extraperitoneal. They were also superfluous so soon as the conditions laid down by Professor Rotter were fulfilled. In the case of the gall-bladder, however, two further conditions had to be satisfied. First the site of the gall-bladder must be so treated that no secretion from it could find its way into the peritoneal cavity, and, secondly, the cystic duct must be so closed that under no circumstances could bile from it enter the peritoneal cavity. In order to fill the first condition, it was necessary that the removal of the cyst should be entirely subserous. It was formerly a custom to remove the bladder direct, and this entailed a good deal of parenchymatous hæmorrhage, some small bile passages also were opened, from which a flow of bile could take place. When, on the other hand, the removal was entirely subserous, these passages were not opened as the whole process took place in a layer of connective tissue. In this way it was possible to arrest all bleeding as the points could be treated separately. The mode of procedure was the following: The serous covering of the gall-bladder was incised all round at about the distance of 1 cm. from the bladder, and the bladder removed from its connective tissue bed below. After removal, the serous edges around the wound were brought together and sutured by a continuous suture. The second condition was the closure of the cystic duct. This was accomplished by ligaturing the free end, forming a loop, so that the ligatured free end should lie over the spot at which it debouched into the common duct, where both were enclosed in a fresh ligature. The procedure was rendered more secure by a further detail. The peritoneum was removed from the cystic duct as far as its entrance into the common one, after the ligatures had been applied as mentioned, the peritoneal covering was again drawn carefully over the whole and secured in position.

They had never had any trouble in cases treated in this way. As a matter of course, if the cystic duct was at all diseased or there was any suspicion that it would not be safe to treat it in the way described, one would remove it down to its entrance into the common duct. During the four years that had elapsed since the introduction of the procedure there never had been any trouble that could in any way be attributable to the duct.

If the operation had been aseptic throughout, the sutures should be passed through all the layers of the abdominal wall, through peritoneum, muscle, fat and all.

If, on the other hand, there had been any infection during the operation, the peritoneum only had been closed at the time, the muscles were only brought together by a few interrupted sutures, small strips of iodoform gauze were placed in the interspaces, and the fatty parts were broadly tamponed. As a rule, no abdominal hernia followed this method of treatment. In about one-third of their cases, however, they had been obliged to insert tampons, so that the method was not one that could be relied on absolutely. These were cases, in the first instance, in which the bladder could not be entirely removed through connective tissues, where it was atrophied it was very difficult to do this. Secondly, in cases of recent inflammation the peritoneum was soaked in œdematous infiltration, and became so tender that sutures would not hold easily. In such a case a tampon must be made use of.

The speaker then related in detail a number of cases in which the plan, above described, had been successfully carried out.

AUSTRIA.

Vienna, Sept. 7th, 1912.

The Origin of Sclerosis.

At the Gesellschaft für Innere Medizin, Marberg discussed the various causes of sclerosis, and concluded by affirming that it was endogenic in nature, with a degeneration of the ganglionic cells, the parenchymaphase following as a secondary. Primary glia growths were only to be found in tumours, which he attributed to vascular injury in the fœtal or infantile state, progressing slowly afterwards. The next group of cases were those coming under the head of multiple and diffuse sclerosis, recognised as inflammatory. The first of these usually commence in the infantile period after infectious diseases, such as measles, diphtheria, scarlet fever and pertussis, and is characterised by a slow, insidious growth, and intermittent and nonfebrile in its course, according to the site affected. This form is accompanied at an early stage with loss of abdominal reflex, indicating a degeneration of the central structure of the nerve, which is identified as parenchymatous toxic of the periphery. The diffuse sclerosis is associated with primary imbecility or idiocy, followed by spastic paraplegia. The commencement of this form has no typical course, but the absence of inflammation in its genesis is noticeable. To this class Merzbach's disease belongs, which he distinguished from sclerosis by being, in his opinion, a family hereditary disease Its anatomical peculiarity is an intermitting degeneration observed along the axis cylinder of the nerve, and followed by the secondary sclerosis, which Merzbach entitled "aphasia axialis extracorticalis congenita." Pseudo-sclerosis may also be included in this group, as it has all the somatic phenomena of diffuse sclerosis with or without the psychic symptoms, but the tremor is never absent. The histological testimony is in favour of a chemical change in the brain, as there is great absence of fluid in the tissues. The so-called tuberose sclerosis is only a conglomeration of large cells, probably ganglionic, with increase in the glia locating itself sometimes in the centre, other times on the margin or ependign, but always associated with epilepsia, imbecility or other nervous disturbances. These tumours are usually found on the skin, kidneys, or neighbourhood of the heart. Here again we are bound to recognise this change as a defect in the central system similar to those of the amaurotic idiot. This hereditary form of mental degeneration, with general marasmus and paraparesis, is an affection unknown in the Jewish race, but is undoubtedly a degeneration of the ganglionic cells.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Medical Service in the Highlands.—The committee which was recently appointed to inquire into the conditions of medical attendance on the inhabitants of the Highlands and Islands of Scotland has held a number of sittings in different localities during August.

It consists of Sir John Dewar (chairman), the Marchioness Tullibardine, Mr. J. C. Grierson, Dr. Leslie Mackenzie, Dr. McVail, Dr. Miller, Mr. Orrocks, Mr. Lindsay and Dr. Robertson, Inspector of Schools. At the first meeting in Edinburgh, on August 15th, evidence was given by various officials of Government and other departments which are in touch with the problems at issue. The evidence bore chiefly on the high percentage of uncertified deaths in certain parishes, the heavy rates, the low salaries of the Medical Officers, and the unsatisfactory conditions as to housing and security of tenure. The next sittings of the Committee were in Inverness, where evidence was given by the Medical Officers of Health of the adjacent counties and practitioners in the neighbourhood as to the difficulties of travel in these outlying districts, the inability of the inhabitants to pay fees which cover the time and cost of locomotion, and the consequent disinclination to call in a doctor until absolutely driven to do so. Evidence was also heard from the public authorities, including the Lord Lieutenant of Inverness-shire (the Mackintosh of Mackintosh), and Lord Lovat, which went to prove that the burden of local rates was already almost intolerable, and it was urged that some form of Government subvention was imperative. The large majority of the people in the Highlands were stated to be outside the compulsory section of the Insurance Act, and the question of modifying the weekly contribution so as to make medical benefit available for them was considered. At the next sitting of the Committee the tuberculosis problem was under consideration. Especially in the West, phthisis is one of the chief difficulties in connection with medical attendance, particularly as regards early detection and adequate treatment. Dr. Maclean, Superintendent of the Seaforth Sanatorium, founded by Colonel Stewart Mackenzie, of Seaforth, at a cost of £10,000, suggested that a tuberculosis officer, to co-operate with general practitioners, should be appointed. The majority of cases brought under his notice were too advanced for complete recovery. Further evidence was also given as to the inadequacy, at present, of the medical service in such outlying parishes and glens as Glenmoriston and Lochbroom. At the next sitting, held in Thurso, the same facts were urged: the difficulties in that sparsely populated county being nearly as great as in the more mountainous region of the Highlands. On August 26th the Committee met at Kirkwall to investigate matters in Orkney. Here the difficulties of providing adequate attendance on even comparatively well populated islands, separated by dangerous seas, were discussed. Even when several islands are constituted a parish they seldom can offer adequate salaries, and in addition there are difficulties about houses which make it impossible to retain the services of an efficient doctor for any length of time. The experiment of appointing medical women to these parishes is not satisfactory, as the conditions of practice are too severe. The advantage of having trained nurses, connected with the doctors by a system of telephones, was pressed. Pulmonary tuberculosis is said to be declining in frequency. Less than half the infants born are now vaccinated. The Committee is still occupied in taking evidence, and it can hardly be doubted that the state of matters revealed by its investigations will ensure some more adequate provision being made in the future for medical service in the Highlands.

Chair of Pathology, University of Edinburgh.—The Curators have appointed Professor Lorrain Smith, occupant of the Chair of Pathology in Manchester, to the Chair of Pathology rendered vacant through the resignation of Professor Greenfield. The appointment has been well received in Edinburgh, where Professor Lorrain Smith is well known and much liked. He is an old Edinburgh student, and was a Resident Physician in the Royal Infirmary under Sir James Affleck, in 1891. He has had a most distinguished career at Oxford, Cambridge, Strassburg and Copenhagen, and previous to his appointment at Manchester he was Professor of Pathology in Queen's College, Belfast. It is not yet known what changes are in prospect in the relation between the holder of the Chair of Pathology and the Royal Infirmary, but it may safely be said that the department will undergo a complete reorganisation in the hands of the new incumbent of the chair.

Chair of Midwifery, Aberdeen.—The King has been pleased, on the recommendation of the Secretary for Scotland, to appoint Dr. R. G. McKerron to be Professor of Midwifery in the University of Aberdeen, in place of Professor William Stephenson, who has resigned. Dr. McKerron is 49 years of age, and has been in practice in Aberdeen since 1891. He has for many years acted as assistant to Professor Stephenson, and for five years has acted as Physician to the Maternity Hospital.

BELFAST.

Report on the Health of Belfast.—The report of the Medical Superintendent Officer of Health for the city for 1911 has just appeared this week, and forms a notable advance on previous reports, both as to the matters included in it and the manner in which they are presented. Since Dr. Bailie has been severely criticised in the past, it is only fair to acknowledge the excellence of the present report in most respects. It runs to about 170 pages, and includes some sixty or seventy tables and a good index. The introductory summary gives the population of Belfast as 386,449, the births as 28.4 per 1,000, and the deaths as 17.2 per 1,000. The gradual decline in the birth-rate during the last 31 years is shown in Table 9: it was 35.5 in 1890, and for the last four years has been below 30. Owing, however, to the greatly reduced mortality, the natural increase in population was last year 4,339, the largest it has ever been. Particulars of the death-rate are given in a number of very clear tables, the most interesting and satisfactory being No. 17, which shows the rate for the last four quinquennial periods, beginning in 1892, as 24.6, 22.4, 20.3, and 19.0. There is every indication of a further fall, as the various town improvements have time to produce their effects. Referring to zymotic diseases, an interesting table gives the proportion of these treated at home and in hospital during the past eleven years, and it is astonishing to note the change. The percentage of scarlatina cases treated in hospital has risen from 14 per cent. to 78 per cent, of diphtheria from 23 per cent. to 71 per cent., and of typhoid from 43 per cent. to 84 per cent. Apart from all other precautions, such a change must have an excellent effect on the general health. Typhoid, once the scourge of Belfast, has been greatly reduced of late, and only 85 cases were notified last year. There is good reason to hope that a real decrease in the death-rate from tuberculosis is also taking place. The rate last year was 2.1 per 1,000, while seven years ago it was 3.1. About 700 patients were treated in the wards of the Abbey Sanatorium and the Forster Green Hospital, but if further accommodation were available it could easily be utilised. The question of infantile mortality is considered at length, and many tables are given. It is explained that infantile mortality means the number of deaths of infants under one year old, compared with the number of births registered. Last year it was 128 per 1,000, the lowest for 37 years, except in 1884, when it was 126. The main cause of this mortality is no doubt the employment of the mothers in the mills and factories: after confinement the mother stays at home for about a month, then returns to work, and the child is fed artificially. Under the Notification of Births Act, no less than 6,422 cases were investigated, and upwards of 15,000 visits paid; some were helped by the Municipal Milk Fund, some reported to various charitable societies, and many warned to clean their houses, etc. It cannot be doubted that the effects of these visits will be very far-reaching.

A report by the City Veterinarian on the work of the public abattoir affords some rather startling and unpleasant reading. Tuberculosis in cattle is still alarmingly prevalent, especially in the cows, which are old animals, as a rule. Of these 14,711 were slaughtered in the abattoir, and among them 2,852, or 19.38 per cent. were affected. No less than 235, or 1.59

per cent. were destroyed, as being affected with general tuberculosis, and the remainder were passed after the affected parts were removed. It is not pleasant to think of the meat supply from sources where no careful inspection takes place. The National Schools of the city, numbering some 300, are severely, and justly criticised. Unfortunately the powers of the Corporation authorities are limited in dealing with them, and in very many of them extremely bad conditions prevail. On one subject, on which we have for years past asked information, a strange silence still continues, and that is upon the work of the mysterious refuse destructor erected at great expense. Does it work, and if so, what does it destroy? In most things Dr. Bailie does his best to maintain the good name of the city, but in one thing he is less than just, and that is in his aspersions on our much abused climate. He gives a table, No. 57, of the rainfall for ten years past, showing an average fall of 36.84 inches, but he omits to explain that this is measured on the side of the hills to the west of the city, where the fall is naturally much heavier than in the city generally.

Hospital Abuse.—At a meeting of the Belfast Medical Guild, held in the Medical Institute on September 5th, the question of hospital abuse was discussed. Many speakers took part, and as usual in such discussions, there was a clearer recognition of the abuse than of the remedy. The best contribution to the debate was made by Dr. A. P. B. Moore, who knew his facts, and had considered them well before he spoke. The members of the hospital staffs professed sympathy with their brethren, but blamed their committees, and specially those on which working men are represented.

The Insurance Act.—The Belfast papers of Saturday published a long account of the resolutions of the local medical men regarding the working of the Insurance Act, giving the names of all those who have signed the agreement to adhere to the three cardinal points:—Free choice of doctor, wage limit of £2, and payment of 8s. 6d. The names appended number 217, and include practically every man in active practice in Belfast. The document has been sent to the various societies involved, giving notice that all arrangements for contract practice will terminate on December 31, and will only be renewed on these terms.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

PART II. OF THE INSURANCE ACT AS AN INCENTIVE TO MALINGERING.

To the Editor of The Medical Press and Circular.

Sir,—A medical man reading the second part of the National Insurance Act will recognise at once that malingering will be increased through its glaring defects.

Had the Committee of the House of Commons who are responsible for the unemployment section of the Act set themselves the deliberate task of devising a legislative measure calculated to suggest and encourage malingering on the part of employees with the connivance at least of their employers, they could not have done more to secure their purpose than that which they have accomplished in this part of the Act.

The unemployment benefit consists in the payment of seven shillings for fifteen weeks during any one period of twelve months. Men under seventeen receive nothing. Those between seventeen and eighteen years obtain three and sixpence during each week of unemployment. Sickness benefit means the payment of ten shillings a week for twenty-six weeks (minors obtaining less, except under certain circumstances).

Employers are entitled to be refunded one-third of their share of contributions paid in respect of an employee who has been for not less than forty-five continuous weeks regularly at work in their "service." This leaves a margin of seven weeks in each year. Service does not mean employment. An employee may be absent from work without pay, and yet is held to be in service if he is to return to his original employer.

During slack periods an employer might grant his servant leave of absence for seven weeks, without wages and without losing the advantage of retaining the latter in his service for the purpose of the refund mentioned above.

Again, in the case of an employee of sixty years of age, or whose death has occurred after reaching that age, and provided that he has paid not less than five hundred contributions, he, or his personal representatives, shall be entitled to be repaid the amount by which the total amount of his contributions have exceeded the total amount received by him out of the unemployment fund, together with compound interest at 2½ per cent. per annum. This certainly will prove a strong incentive to unscrupulous persons, such as the type malingerers are, to try and substitute the sick benefit of ten shillings a week for the seven shillings provided under Part II. of the Act, and thereby preserve their claims for a large refund at some future date. Part I. does not permit of any similar refund, and the employee forfeits nothing by drawing upon the funds of his Society. (Deposit contributions are an exception in this respect.)

No doubt the vast majority of employers and employees will not be influenced by the opportunities afforded in Part II. of the Act of those of sharp business practices and dishonest natures, I fear, there will be in the future, as in the past, a number who will gladly avail themselves of every defect in an Act to take advantage of such as much as possible.

It is difficult to suggest anything that would prove a check to malingering arising out of the above causes. An honest employer can frequently assist a scrutineer or inspector by giving his opinion of any particular individual's character, but this assistance could not be relied upon in the above cases. Possibly the danger of malingering might be lessened if all employees *entitled* to unemployment benefit had to state when applying for sick benefit whether they were or were not in actual employment at the time of their becoming invalided, and also if their posts were open to them as soon as they were declared physically fit to resume work.

I am, Sir, yours truly,
Seymour Stritch.

13 North Frederick Street,
Dublin.

THE TUBERCULOSIS CAMPAIGN IN IRELAND.

To the Editor of The Medical Press and Circular.

Sir,—In a previous article I outlined a scheme for the establishment of tuberculosis dispensaries with the erection of sanatoria in the coming campaign against the White Scourge. Subsequent reflection has confirmed me in the opinion that the suggestion I then threw out regarding the erection of one large sanatorium for a combination of counties and districts is one that should commend itself to the public. The anxiety displayed by a great many county councils to take an active part in the campaign and discharge the duties devolving upon them in an efficient manner induces me once again to trespass upon your space, and ventilate the conclusions to which I have on mature consideration come. In a complete scheme for the suppression of tuberculosis we must make arrangements for (1) the provision of sanatoria, (2) the establishment of tuberculosis dispensaries, (3) the carrying out of domiciliary treatment.

The education of the public has now reached a high standard through the organisation of the Women's National Health Association, which has been doing such excellent work during the past four years. The passing of the National Insurance Act has brought home to the general public the pressing necessity that has arisen for immediate action, and the funds rendered available through that Act have placed at the disposal of the public bodies the means whereby that necessity can be largely met; whilst the generosity of the Government in offering large subsidies for the erection of sanatoria, and the promise on the part of the Treasury to meet one-half of the expenditure incurred in the treatment of the disease, have still further placed us in a position of vantage which must be occupied without any immediate delay. The statutory auhorities upon whom will devolve the chief work of organisation and administration have thus by education and the grant of financial assistance been presented with the strongest inducements to do their share in the noble work, and the entire public looks forward with hope and confidence to the approaching struggle.

The establishment of a tuberculosis dispensary in every county will form the major part of the organisation. This can be done forthwith, the appointment of a chief tuberculosis officer being the first essential. The officer selected for this post must be one who by reputation and experience and position in his profession can command the confidence and invite the co-operation of his fellow practitioners. His duties will not be confined to the supervision of the dispensary arrangements; he will direct the general treatment and act as consultant and specialist to the general practitioners, who will be entrusted with the domiciliary care and treatment of patients in their own homes. He will also act as superintendent of any sanatorium that is erected by his council, and should be required to act as adviser to the county insurance committee. I regret, however, that the salaries hitherto offered by the majority of county councils are not such as to induce men of proper standing and experience to throw up their present positions and practices and accept these appointments. They will thus fall into the hands of perhaps young men, who may have acquired their experience in the treatment of fifty or a hundred selected cases in small sanatoria, and who are not qualified to act as consultants to men who during the course of their practice have watched the progress of thousands of cases of tuberculosis, and obtained experience of the treatment in all stages of the disease from its earliest development.

With regard, however, to the erection of sanatoria—and this brings me to the chief purpose of this letter—£145,000 have been placed by the Treasury to the credit of Ireland for this specific purpose. Of this sum £25,000 have been placed in the hands of the W.N.H.A. to make temporary provision for the treatment of patients pending the building of permanent structures. The £120,000 is to be allocated to the different county councils in proportion to the population of the county, and the sum thus allocated to each, while fairly large, would only be sufficient to build a sanatorium of very moderate dimensions. Under the provisions of the Public Health (Ireland) Act, 1878, and the Tuberculosis Prevention Act it is permitted to two or more councils to combine and construct a joint sanatorium, but in only two instances has this arrangement been carried out. Now, a very little reflection will show how much more efficient and economical it is to have one large, well-staffed, up-to-date institution, suited to all requirements than a multiplication of several small ones, each with its own administrative organisation and corresponding expenditure. This is self-evident, so that I need not use your valuable space to dilate upon it further. But under the National Insurance Act it is possible to take a further step, and by a still wider combination erect a provincial sanatorium suitable for the requirements of all the counties in a province, and equiped with 200 or 300 beds. Such an institution could be laid out on the lines of the Frimley or Benenden sanatoria in England, or the memorial one to his late Majesty, which is being erected in Wales. Under section 64 (3) the Local Government Board have the power for the purpose of facilitating co-operation to make on their own initiative an order for the establishment of joint committees or joint boards consisting of county councils, county borough councils, or other local authorities (except Poor-law authorities) to carry out the scheme for the provision of sanatoria. Such an order may provide how, in what proportions, and out of what funds or rates the expenses of providing such institutions, "so far as they are not defrayed out of grants under this section," are to be paid, and may contain such other provisions as appear necessary. The £120,000 used thus for the erection of a provincial sanatorium in each of the four provinces of Ireland would, I believe, do far more for the suppression of tuberculosis in this country than 30 or 40 county hospitals maintaining an independent and unreliable existence. Such institutions would command the confidence of every practitioner in the country, the treatment therein would be of the highest order, and the results proportionate. With one in each province, and a dispensary in each county under the charge of a capable and experienced tuberculosis officer, the general body of practitioners who, as the main fighting units, would carry out the domiciliary treatment of the patients in their own homes, could be relied on to do their part in stamping out the disease.

I am, Sir, your truly,

Samuel Agnew.

Lurgan, September 2, 1912.

"ANOTHER RESIGNATION."

To the Editor of The Medical Press and Circular.

Sir,—You will regard my contributions as a "standing dish"; I assure you, however, that such is not the case. If you continue to publish matter so stimulating to reflection, I feel it my duty to respond, lest from lack of enthusiasm on the part of your readers you fall from your high estate. "A Resignation from the B.M.A."; this title at once arrests our attention. Such a calamity 12 months ago would not have been recorded, but a great many things have happened during the last year. Mr. Lloyd George has launched his little ewe lamb, jealously safeguarding its career by stopping the mouth of any gainsayer, and pointing out its future possibilities in order to hide its present hideousness. It has been duly christened disendowment of the medical profession, vote catcher; and it has been registered as an Act. Unfortunately it has already belied its name, it certainly is not a vote catcher, and the medical profession refuses to be disendowed. Already, therefore, this marasmic infant is under a cloud. Your cheery optimism, Mr. Editor, has been replaced by pessimism. You regard the resignation of Dr. Forbes as ominous. One swallow does not make a summer, one black sheep does not contaminate a whole flock. So, cheer up, there are very many men in the profession who are not M.O.H.'s, and who have not any chance of being appointed tuberculosis officers, even if they wished for such an appointment. Men who are general practitioners, who have been aptly termed the backbone of the profession, who owe nothing to this or any other Government, but to whom each Government in turn owes a debt which it can never repay. These are the men most concerned in the working of the Insurance Act. I should be far more depressed if I read of the resignation of one of the G.P.'s of Manchester. Then I should wonder whether we were beginning to suffer from osteomalacia —but not yet! Besides our profession there are many other bodies who doubt the benefits which are supposed to flow from this Act. Think of the 17,000 in Birmingham, who are withstanding the generous offer of 9d. for 4d. Think of the farmers of Beds. and Bucks, and take heart! We are not the only unbelieving Thomas's.

I am, Sir, yours truly,

S. J. Ross.

Bedford, September 9th, 1912.

OBITUARY.

MR. L. A. BIDWELL, OF LONDON.

It is with the deepest regret that we have to record the death of Mr. Leonard Arthur Bidwell, F.R.C.S., Senior Surgeon to the West London Hospital and Dean of the West London Post-Graduate College, which took place on the 2nd inst., consequent upon an operation for appendicitis, at the age of 47. Educated at Blackheath School, Mr. Bidwell, who was the son of a former chief clerk in the General Post Office, received his medical training at St. Thomas's Hospital and in Paris. He qualified as L.S.A. in 1886, M.R.C.S. in 1887, becoming F.R.C.S. in 1890. To say that he will be sorely missed at the West London Hospital is but feebly to express the truth, for Mr. Bidwell was the very life and soul of the post-graduate college connected with the institution. All his best energies were devoted whole-heartedly to the interests of the College, which, largely owing to his untiring efforts, has attained a position of the first rank as a post-graduate centre of instruction, its high level of efficiency being fully recognised by the Government medical services. As Dean of the College and Lecturer in Intestinal Surgery therein, Mr. Bidwell commanded the respect and won the affections of all with whom he was brought into contact. He was President of the Chelsea Clinical Society, Surgeon to the Hospital for Invalid Ladies, Lisson Grove, and Consulting Surgeon to the City Dispensary and to the Blackheath and Charlton Hospital. He was also a Medical Referee under the Workmen's Compensation Act and Surgeon-Major in the Royal Bucks Hussars, Imperial Yeomanry. His book can "Intestinal Surgery," a subject on which he was an authority, has already established for itself a well-deserved reputation, and his "Minor Surgery" was published last year. Mr. Bidwell married Dorothea, the eldest daughter of Sir Roper Parkington.

DR. G. GARLICK, OF LONDON.

WE regret to record the death of Dr. George Garlick, of Gordon Square, Bloomsbury, and Heathfield, Thakeham, Pulborough, Sussex, which took place last week at Worthing, as the result of an accident. The deceased, who was educated at University College, London, became M.R.C.S.Eng. in 1874, and L.R.C.P. in the following year, taking the M.D.Lond. in 1876. Dr. Garlick was Medical Referee of the Teachers' Provident Society, and formerly Registrar of the Hospital for Sick Children, Great Ormond Street. He was also Clinical Assistant at the Consumption Hospital, Brompton, and held an appointment at University College Hospital. He devoted special attention to the treatment of children's diseases, and contributed to medical publications "Ophthalmoscopic Observations in the Tubercular Meningitis of Children," "Tubercular Peritonitis in Children," and other articles, including one on "A Case of True Diaphragmatic Hernia."

SURGEON-MAJOR KENDALL.

THE death took place last week, at 8 Harold Road, Upper Norwood, at the age of 81, of Surgeon-Major Bernard Kendall, a survivor of the Indian Mutiny. Surgeon-Major Kendall married, 1855, Barbara, the daughter of Captain Lucas, of the Hon. East India Company. At that time he was Assistant Surgeon in the service of the Company. Later he was appointed Assistant Surgeon in the General Hospital at Calcutta and at the Fort, and in 1857, when the Mutiny broke out, was stationed with the 2nd Oude Infantry at Secrora, about 50 miles from Lucknow. He remained with the regiment until it mutinied, when he escaped with Sir Charles Wingfield and other officers. Mrs. Kendall had previously gone into Lucknow with the other women and children. Surgeon-Major Kendall remained in the Indian Medical Service for 21 years and then retired.

REVIEWS OF BOOKS.

THE CAUSE OF CANCER. (*a*)

THE late Sir Henry T. Butlin once stated that three requirements were necessary in an individual before he could lay claim to speak with any authority upon the subject of cancer, a knowledge of the protozoa, experience of experimental investigation of cancer, and experience of the clinical pathology of cancer in the human subject. The author of this book certainly fulfils these requirements, so that his views on malignant disease are entitled to serious consideration, not only by public bodies competent to weigh evidence in a scientific fashion, but also by every practitioner of medicine to whom the question of cancer is a subject of interest. The reader will find, plainly stated, the evidence from which Mr. Jackson Clarke deduces the protozoic origin of the commoner forms of cancer, and the report of the Morbid Growths Committee of the Pathological Society of London in 1893, upon his labours is critically examined. The author's reply, published, with his account of cancerous disease, first in THE MEDICAL PRESS AND CIRCULAR, September 30, 1893, is added in the form of an appendix. An earnest plea is made for the careful reconsideration of his work and of the relations of the protozoa to cancer by such a body as the Imperial Cancer Research Fund. The work of this Fund, in the opinion of the author, has been lacking because he has not seen any evidence that "any of the workers have made a special study of the protozoa" in their relationship to malignant disease. The time may yet arrive when the merits of Mr. Jackson Clarke's researches will receive their due recognition, and in the end it may prove that "the protozoa are deadlier enemies of man even than the bacteria."

SAVILL'S CLINICAL MEDICINE. (*a*)

THE appearance of the third edition of this excellent manual will be welcomed amongst a large circle of medical readers with whom the book has been from the first deservedly popular. Owing to the death of the author by a lamentable accident, the task of editing the present edition has devolved upon his wife, Dr. Agnes Savill. The task of bringing the book up to date has been well and conscientiously performed, and fully sustains the progressive reputation already gained. One secret of its attractiveness is to be found in its careful condensation, whereby the wide subject of clinical medicine is dealt with in the space of a single volume of something under 1,000 crown octavo pages. The medical practitioner will find here a clear account of most of the points as to which he is likely to need a reference. For the senior student reading for the higher examination it would be difficult to imagine a more generally useful volume. The late author's position as Examiner in Medicine enabled him to bring out leading and neutral points in clear perspective—a gift that comes more or less naturally to the ideal examiner. Dr. Savill's special work as a dermatologist and a neurologist is reflected in the conciseness with which both these subjects are dealt with. In the present edition Mrs. Savill has secured the revision of various well-known authorities in several of the sections. Such names as those of Dr. Ford Caiger, Dr. F. M. Sandwith, Dr. Leonard Williams, Dr. Angus MacGillivray, Dr. R. H. Cole, Dr. Harry Campbell, Dr. L. Garrett Anderson and Dr. Frederick Langmead appear on the list. Two polygraph tracings of the heart have been contributed by Dr. James MacKenzie; and Dr. Gordon B. Ward has contributed a chapter on diseases of the blood. The general turnout of the book is excellent, and the coloured illustrations reach a high level of technical excellence.

THE EXTRA PHARMACOPŒIA. (*b*)

THE fifteenth edition of this well-known work has just appeared, and the publishers have found it neces-

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(*a*) "The Cause of Cancer, being Part III. of 'Protozoa and Disease.'" By J. Jackson Clarke, M.B., F.R.C.S., Senior Surgeon to the Hampstead and North-West London Hospital and Surgeon to the Royal National Orthopaedic Hospital. Fcp. 4to. Pp. xii., 112. London: Baillicre, Tindall and Cox. 1912. Price 7s. 6d. net.

(*a*) "Clinical Medicine: A System of." By Thomas Dixon Savill, M.D.London. Third Edition, revised by Dr. Agnes Savill. London: Edward Arnold. 1912. Price 25s. net.

(*b*) "The Extra Pharmacopœia." By Martindale and Westcott. 15th edition in 2 volumes. Fcap. 8vo. Vol. I. xxxi., 1,114. Price 14s. net. Vol. II. viii., 370. 1912. London: H. K. Lewis. Price 7s. net.

sary to issue it in two volumes owing to the immense growth of the subject matter during the last two years. In spite of the division, however, the size of the first volume has been kept down to practically that of the last edition. This portion of the work contains, in addition to the complete pharmacopœia of official remedies and all the principal non-official chemicals and drugs with their properties, modes of administration, and references to current literature, valuable chapters on vaccinotherapy, the Poisons and Pharmacy Act, and a comprehensive therapeutic index of diseases and symptoms. The general posological index referring to the two volumes, contains some twelve thousand headings. Briefly to indicate only a few of the new or enlarged features of this volume, we may mention the twenty-five pages devoted to salvarsan; the methods of spinal anæsthesia; anserine mulls; iontophoresis; tuberculin administration; and the newer cell-proliferants.

The second volume, one-third of the size of the first, contains analytical memoranda, bacteriological notes, an account of home and foreign mineral waters, glossaries, and an organic analysis chart. A succinct analysis of patent medicines is given, and there is a note upon the Select Committee upon patent and proprietary medicines which met for the first time on May 9th, 1912. In this volume standard bread is introduced, and some new data are given with regard to beri-beri and leprosy. The salient features of the last annual report of the Imperial Cancer Research Fund are also given and some recent diagnostic methods are described.

To say that the "Extra Pharmacopœia" is a mine of information is feebly to express the truth. It is rather a never-failing treasury, whose inexhaustible stores are all-sufficient to meet the demands of the most exacting inquirers as well as to satisfy the needs of the humblest seeker after therapeutic truth. No practitioner should remain a single day without possessing a copy.

THE MEDICAL ANNUAL. (*a*)

The reviewing of Wright's *Medical Annual* is always a pleasant task. Whatever may be his interests, the reader is sure to find them roused in turning over its pages. The anonymous editors, as usual, do not content themselves with merely giving a *résumé* of the year's work in the various fields of medicine and surgery, but they include special articles of much detail on certain subjects. The most noticeable of these articles in the present volume is that on salvarsan. The author treats fully of the method of administration and the toxicology of this drug, and its uses in syphilis and in other diseases. His tone is cautious throughout, and the author maintains that "Ehrlich's hope of curing the disease by a single administration of the drug has proved fallacious." He believes, too, that salvarsan has made nerve relapses more common.

The article on vaccines is disappointing, considering the interest generally felt at present in this method of treatment. A good deal of space is taken up with the description of a mixed and modified vaccine of the blunderbuss type, made from growths of seven or more organisms, and to be used in infections of unknown cause! It is this sort of thing which excuses the prejudice still felt against vaccine treatment in certain quarters. We hope that the editors will next year see fit to give adequate consideration to this important subject.

Many readers will turn with interest to the article by Dr. Bedford Pierce on psycho-analysis. He gives a summary of recent work on the subject, but sets forth fairly the dangers which possibly lurk in the method. He seems to regard it as of more utility in diagnosis than in treatment.

Space forbids us to deal with more of these articles. No one can turn over the pages of the book without finding much that is both interesting and instructive. Every general practitioner should make it his duty to study the volume with care, and even the specialist who reads the pages dealing with his own line of work will not waste his time. We congratulate the editors on keeping their volume for 1912 up to the high standard of its predecessors.

MEDICAL NEWS IN BRIEF.

A New Hospital for Women.

A movement has been set on foot to add to the number of hospitals which admit women on their honorary staffs, and a strong committee, including, among others, Lady Chance, Miss Chadburn, M.D., the Hon. Mrs. Franklin, and Miss Davies-Colley, M.D., F.R.C.S., has been elected. It is proposed to erect the new women's hospital in South London, and that it should consist of an in-patient department, with (1) general wards and (2) private wards, the latter being intended for women of small means who cannot afford medical attention in a nursing home and yet should not be occupying the free wards intended for the very poor in ordinary hospitals. These private wards will be provided for patients paying at an inclusive rate of from one to three guineas a week. There will be a well-staffed out-patient department with a woman almoner or inquiry officer. A site has already been secured, consisting of three acres of freehold ground with a large frontage on Clapham Common. The out-patient department is separate, and will be situated in the main thoroughfare near the termini of the great southern railways. It is hoped that this department will be opened in the autumn. The scheme is being loyally supported by medical women and by those interested in the woman movement, including Mrs. Garrett Anderson, M.D., the Lady Robert Cecil, the Lady Cowdray, Sir Bryan Donkin, F.R.C.P., Sir James Goodhart, M.D., F.R.C.P., Miss Hamilton, M.D., the Bishop of Kingston, Lady Roberts, Mrs. Scharlieb, M.D., the Bishop of Southwark, the Lady Templemore, Miss Jane Walker, M.D., the Bishop of Winchester, and many others.

Death of a Pioneer Woman Physician.

At the age of 78, Dr. Sarah F. Wells, one of the first women physicians of the United States, has recently passed away in her native State of Ohio. Dr. Wells spent a considerable portion of her life in Turkey and India, being the first qualified woman physician to be appointed to a harem in Turkey. She also devoted many years of her career to securing proper medical treatment for the Indian women and children, and stirred the public conscience on their behalf by giving lectures in the large cities in India.

Sad Death of a Medical Man.

The body of Dr. Alfred Harris, recently appointed Tuberculosis physician for Swansea and district under the King Edward Memorial scheme, was found dead in bed at one of the leading Swansea hotels last week. The deceased had been staying at the hotel since Tuesday prior to taking a house. It is believed he had taken an overdose of morphine. Dr. Harris, who came to Swansea from the Municipal Sanatorium at Shirley, Southampton, had had a brilliant career, being M.D., Ch.B., and D.P.H. At the inquest it was stated that prussic acid, in addition to morphia, was the cause of death. The usual verdict was returned.

School Clinics at Newport.

At a recent meeting of the Monmouthshire Elementary Education Committee the question of school clinics was again discussed. The recommendations of the Committee were adopted. Altogether there will be 15 clinics, engaging four nurses, one whole-time ophthalmic surgeon, and one whole-time dental surgeon. The initial outlay will be £11,000, and annually the upkeep will cost £2,000.

(*a*) "The Medical Annual: A Year Book of Treatment and Practitioner's Index." 1912. Thirteenth year. Pp. cxx. and 887. Bristol: John Wright and Sons, Ltd. Price 8s. 6d. net.

NOTICES TO CORRESPONDENTS, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

NOTICE TO HOSPITALS AND COLLEGE DEANS.

THE Editor wishes to thank the above gentlemen attached to the various Schools and Hospitals for supplying him with the information from which the foregoing pages have been composed.

NOTICE TO OUR READERS.

As this number is mainly devoted to information necessary for students intending to join one or other of the various medical colleges, and for those who, having passed their curriculum, are about to enter the ranks of the profession, much of the ordinary matter which usually fills our columns is necessarily deferred till next week.

GRATUITOUS COPIES.

A VERY large number of copies of this issue are being sent gratuitously to all the educational establishments, hospitals, reading-rooms, clubs, and large hotels in the United Kingdom, and to a large number in America, India, the Colonies, and on the Continent; should any of our readers desire to present a copy to a patient or friend who contemplates sending his son to a medical school, our publisher will be happy to supply him with a duplicate free of cost on receipt of address.

F.R.C.S.EDIN. (Beds.).—Electrolysed fluid for disinfecting purposes has been in use for the last six years by the Poplar Borough Council, the annual cost last year being about £100 for the manufacture and distribution of 53,000 gallons. It forms a cheap, clean, and efficient chlorine solution which may be recommended for most purposes where this form of disinfectant is favoured.

COMMON SENSE COOKERY.

A SERIES of lectures has been organised by the secretary of the Society of Medical Officers of Health on "Common Sense Cookery in Health and Disease." The lectures are designed to assist the work of fighting consumption in the homes of the poor, for whom the knowledge of the preparation of cheap and appetising meals is not only an economic but an important hygienic consideration.

THE MEDICAL HERB CROPS.—It is reported that English growers of peppermint, lavender, and other medicinal herbs have suffered serious loss from the recent rains. In all cases crops are considerably below the average, and in some instances growers report that the crops will be the smallest on record.

WORKMEN'S COMPENSATION ACT, 1906.

THE Home Secretary gives notice that in consequence of the resignation of Mr. James Mungle, the appointment of Medical Referee under the Workmen's Compensation Act, 1906, for the Dunfermline with Kinross District is now vacant. Applications for the post should be addressed to the Private Secretary, Scottish Office, and should reach him not later than the 27th September.

THE HISTORY OF AMBULANCE.

MEDICAL men engaged in teaching first aid and ambulance will find Mr. Charles H. Miles' little brochure on "An Historical Outline of Ambulance from the Earliest Times" (Bristol: John Wright and Sons. 3d. net) both interesting and instructive. A brief sketch is given of the art and practice of ambulance from the times of the ancient Greeks to the foundation of the St. John Ambulance Association in 1877.

Appointments.

BRYCE, A. G., M.B., Ch.B. Vict., House Physician at the Manchester Royal Infirmary.

JEFFERSON, J. C., M.B., Ch.B.Vict., Senior House Surgeon at the Manchester Royal Infirmary.

MACKLIN, A. H., M.B., Ch.B.Vict., House Physician at the Manchester Royal Infirmary.

MIDGLEY, P. H., M.B., Ch.B.Vict., Junior House Surgeon at the Manchester Royal Infirmary.

MOLAN, CORNELIUS, L.R.C.S.Irel., Junior House Surgeon at the Stockport Infirmary.

RADCLIFFE, FRANK., M.B., Ch.B.Edin., Assistant House Physician at the Devonshire Hospital, Buxton, Derbyshire.

SAVILL, AGNES F., Assistant Physician to the London Skin Hospital, Fitzroy Square.

SAWDON, G. E., M.B., Ch.B.Vict., Senior House Surgeon at the Manchester Royal Infirmary.

SEPPELT, NORBERT E., L.R.C.P. and S.Edin., Junior House Surgeon at the Stockport Infirmary.

THOMSON, H. HYSLOP, M.D.Glasg., Medical Officer under the King Edward VII. Welsh National Memorial Scheme.

VINCENT, W. H., L.M.S.S.A., House Surgeon at the Evelina Hospital for Sick Children.

WHITAKER, H., M.B., Ch.B.Edin., House Surgeon at the Stockport Infirmary.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointment:—Long Sutton (Lincs.).

Royal Victoria Eye and Ear Hospital.—Two House Surgeons. Salary £40 per annum with board. Applications to the Hon. Secretary, Adelaide Road (see advt.).

Birkenhead Borough Hospital.—Senior House Surgeon. Salary £100 per annum, with board and laundry. Applications to the Secretary at the Hospital.

Powick (Worcester) County and City Asylum.—Junior Assistant Medical Officer. Salary £160 per annum with board, furnished apartments, washing, and attendance. Applications to Medical Superintendent.

The Royal Infirmary, Hull.—Senior House Surgeon. Salary £150 per annum, with board and furnished apartments. Applications to Chairman, House Committee.

Royal Isle of Wight County Hospital, Ryde.—Resident House Surgeon. Salary £100 a year. Applications to the Secretary.

The Royal National Hospital for Consumption and Diseases of the Chest, Ventnor.—Senior Resident Medical Officer. Salary £250 per annum, with board and lodging in the Hospital. Applications to the Secretary, 18 Buckingham Street, Strand, London, W.C.

Stirling District Asylum, Larbert.—Junior Assistant Medical Officer. Salary £140 per annum, with board, lodging, and laundry. Applications to the Medical Superintendent.

Dundee District Asylum.—Junior Resident Medical Officer. Salary £120 per annum, with board and apartments. Applications to Robert Allan, Clerk, Dundee District Board of Lunacy, Chambers, West Bell Street, Dundee.

Births.

BENNETT.—On Sept. 1st, at Staverton, 35 Vancouver Road, Forest Hill, S.E., the wife of Colin E. Bennett, M.R.C.S., L.R.C.P.Lond., of a son.

CURWEN.—On Sept. 1st, at The Elms, Frome, Somerset, the wife of H. Curwen, M.B., Ch.B., D.P.H., Medical Officer Zanzibar Government, of a son.

HARRISSON.—On Sept. 1st, at The Priory, St. Neots, the wife of Ernest H. Harrisson, M.A., M.D (Cantab.), of a daughter.

O'GRADY.—On Sept. 5th, at No. 1 Merrion Square, Dublin, the wife of Major Standish de C. O'Grady, R.A.M.C., of a son.

Marriages.

COOMBES—MILNE.—On Sept. 4th, at All Souls', S. Hampstead, Percival Charles Coombes, M.R.C.S., L.R.C.P., of the Surrey County Asylum, Brookwood, to Susie May, daughter of the late David Braick Milne, of Liverpool, and of Mrs. Milne, of Belsize Crescent, Hampstead.

COWELL—MILLER.—On Sept. 3rd, at Holy Trinity Church, New Barnet, Ernest Marshall Cowell, M.D.Lond., F.R.C.S.Eng., to Dorothy Elizabeth, only daughter of Arthur and Christiana Miller, of Lime Hurst, New Barnet.

DOBSON—KING.—On Sept. 4th, at St. Olave's Church, London, Maurice Rowland Dobson, M.B., B.S.Lond., L.R.C.P., M.R.C.S.Eng., younger son of Jabez Dobson, Woodbank, Ilkley, to Ethel May King, granddaughter of the late William Wells King and Mrs. King, of Malton.

LIPSCOMB—MILMAN.—On Sept. 7th, at St. Albans Abbey, Eustace Henry Lipscomb, M.B.Cantab., J.P., of St. Albans, to Mildred Charlotte, fourth daughter of the late Lieut.-Colonel Everard Stepney Milman, R.H.A.

NESFIELD—BAIRD.—On Aug. 31st, at All Saints' Church, Norfolk Square, London, W., Capt. V. B. Nesfield, I.M.S., son of J. C. Nesfield, M.A.Oxon., of Ealing, Middlesex, to Grace Baird, daughter of the late Dr. J. T. W. Baird, of Congleton, Cheshire.

SECCOMBE—LANG.—On Sept. 5th, at Eggbuckland, Captain J. W. S. Seccombe, R.A.M.C., eldest son of Paymaster-in-Chief J. W. Seccombe, R.N., and Mrs. Seccombe, of Southsea, to Beatrice Martha, second daughter of the late Captain H. B. Lang, R.N., and of Mrs. Lang, Hartley Avenue, Plymouth.

Deaths

COVEY.—On Aug. 31st, Edward Charles Covey, M.R.C.S., L.S.A., of Alresford, Hants, aged 71.

COX.—On Aug. 28th, at Corsham, Wilts, Fleet-Surgeon A. H. Lissant Cox, R.N.

KENDALL.—On Sept. 3rd, suddenly, at "Secrora," 8, Harold Road, Upper Norwood, Bernard Kendall, Surgeon-Major, Retired List I.M.S., aged 81.

DR. THOMPSON lately returned from Cordoba, Argentina, is requested to communicate by letter, with "A.B." c.o., H. Green, 120 Chancery Lane, E.C.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, SEPTEMBER 18, 1912. No. 12.

NOTES AND COMMENTS.

An Over-burdened Medical Officer of Health.

THE acceptance of the superintendency of the Brighton Sanatorium by Dr. Duncan Forbes opens up a question of public importance, apart from its bearing upon internal professional politics. If Dr. Forbes is prepared to withdraw from his pledges and to flout the opinion of an overwhelming majority of medical men, it is to be hoped that his shoulders will be broad enough to bear the burden he has apparently assumed in so light a fashion. Time will settle that aspect of the affair; but there is another which demands the thoughtful attention of all interested in the responsible administration of public health. Of late years, as everyone knows, the duties of the medical officer of health have been greatly multiplied. The control of infectious disease, the medical inspection and care of school-children, health visitation, the control of milk supply, and advances in many other directions have entailed a great amount of additional work on that officer. In any large centre of population, it may be asserted without hesitation that the duties of his responsible post are enough—and, as a rule, more than enough—to occupy the energies of any one man, who, be it remembered, has also to keep abreast of current scientific advances in his branch of special work. Under such circumstances, is it possible for a busy man to undertake the control of a sanatorium full of consumptive patients? If he is to look after sick folk effectually, he cannot devote much time to the discharge of the multifarious duties of his office and *vice versâ.* The ratepayers cannot have it both ways. If they make a dual appointment of the kind that has found favour with the Brighton authorities, they must seriously handicap either their public health or their sanatorium service. To saddle one man with two heavy burdens of that kind is to repeat the folly which in the past has rendered contract medical work a conspicuous failure—namely, to strike a bargain for service which it is physically impossible for any one man efficiently to render.

Death After Tooth Extraction.

AT a Bethnal Green inquest last week a qualified chemist was censured for not having kept his tooth-extracting instruments clean. The incident deserves wide notice for various reasons. The facts disclosed in court were that deceased, a girl, 22 years of age, went for a visit to Margate, where she had a tooth extracted by a local chemist. Her mouth swelled, and on her return home, after visits to two private medical men, she went to the London Hospital, where a second tooth was extracted, and she was sent to the infirmary. A few days later she left the latter institution against the doctor's wishes, and died three days later. The inevitable deduction from this account is that of general sepsis following the removal of a tooth. The details of the causation, however, are by no means clear. It was alleged that the chemist kept his instruments in brown paper, and did not clean them before use; but he himself declared that he "usually" boiled his forceps in carbolic lotion after use, and "often" used an antiseptic before operation, but could not say he did so in that particular case. He kept them in chamois leather. The medical evidence was of the kind one would expect under such circumstances. A medical witness remarked "if a girl's mouth were septic, the taking out of the tooth might have caused the trouble." At the wish of the jury the coroner severely reprimanded the chemist for not having kept his instruments clean. As the jury had the whole evidence before them, it is likely they had sufficient grounds for that opinion. As regards the local infection, clearly it may have arisen either from septic instruments or from a previously septic oral condition complicating the operation. In either case, the deplorable result would in all probability have been avoided by a skilful expert. At any rate, operation under such circumstances by an unqualified dentist is undesirable in the interests of the public, for it subjects the patient to avoidable risks of the most serious nature. In a word, it defeats the whole aim and object of the Dental Acts.

Unqualified Dental Practice.

THE intention of the Legislature was to protect the public against the practice of dentistry by ignorant and unskilled persons. It is based on the fact that dental science has reached a high pitch, and to be competent in its practice it is necessary to be educated in anatomy, physiology, the principles of medicine and surgery, and to possess a great amount of mechanical and technical skill and training. For a man without the requisite qualifications, as obtained by examination and vouched for by a State diploma, to deal with a septic mouth is to court disaster. Why, then, is not the highly desirable statutory protection of the safety of the citizen afforded by the Dental Acts supported by the corollary of the suppression of the quack? Why, indeed? And why is he not similarly protected against the medical quack? The pith of the present position is that the Dental Acts are a dead letter. It is open to every ignorant person to set up as a dentist, and there is no one to stop him doing so. The Penal Committee of the British Dental Association is not only impotent, but to such an extent are their hands weakened by the facilities open for unqualified practice that it is only with difficulty they are able to keep up a show of discipline in the ranks of the duly qualified practitioners. The latter find themselves terribly handicapped in the battle of professional life. After a long and expensive education, they are called upon to compete with an army of unqualified charlatans, who attract patients by every sort and species of advertisement, which, of course, cannot be used by the qualified dental surgeon. The present position is preposterous and absurd. It is infinitely worse than the state of affairs before, inasmuch as the number of quacks has increased a hundredfold. So far as the qualified chemists are concerned, it is a pity that members of an honourable body should be found engaging in a task which the Legislature has decided should, in the interests of the public, be handed over to a special trained class of men. The better kind of qualified chemist has long since abandoned the extraction of teeth.

Law for Lawyers and Law for Doctors.

At a London police-court last week was once more illustrated the efficiency of penal clauses of the Acts which regulate the profession of solicitor. A solicitor's clerk was fined £10 and costs for "counselling and procuring" a qualified solicitor to perform some trivial legal service for him. It appeared that the solicitor in question, who was ordered to pay a nominal penalty of 10s., had not renewed his certificate, and his name was temporarily off the rolls. The Law Society being informed instituted the prosecution. When will similar powers to enforce similar laws be conferred upon the General Medical Council? At present the most fraudulent of unqualified quacks can assume the title Dr. with impunity; and not only may a qualified man practice when unregistered, he may with impunity go on practising and using medical titles after his name has been struck off the Register for infamous conduct of any degree of gravity.

Johne's Disease.

The name of Johne's disease, although familiar enough to farmers and stock owners, who have been great losers from it, is probably unknown to the average medical reader. It has hitherto been impossible to diagnose the malady until so far advanced as to render the affected cattle useless for breeding or milch purposes, and of very little value to the butcher. The flesh of animals suffering from the disease is not unfit for human consumption, but in the later stages emaciation becomes extreme, and the carcases practically lose all value. Early diagnosis of the disease would prevent this loss, and it is now stated that Mr. F. W. Twort, M.R.C.S., and Mr. G. L. Ingram, M.R.C.V.S., of the Brown Institution, have just obtained a diagnostic reagent which will effect this purpose. This reagent injected subcutaneously causes a rise of temperature of from 4½ to 5½ degrees Fahrenheit in an animal in which the disease exists, but does not affect the healthy. As so often happens in similar instances where a national service is performed, the work has been paid for from virtually private endowments, not by Government. In the present case the Royal Society and the Trustees of the Henry Dixon Fund have found the money. The Development Fund Commissioners, we are told, were twice asked for a grant of £1,000, which each time was refused.

LEADING ARTICLES.

CERTAIN ECONOMIC POINTS IN MEDICAL PRACTICE.

Recent events in the medical world have given rise to a more generally critical attitude with regard to its collective interests. Whatever may be the outcome of the present dispute, it has brought home to medical men an intense conviction of the value and the necessity of professional unity. For many years past it has been a commonplace amongst a certain class of medical writers to deprecate the introduction of the spirit of trades unionism amongst the members of the profession. Such views were for the most part uttered by men who had never come into contact with the conditions of practice amongst the poorer classes of the community. Had any general and effective combination existed for the defence of the collective interest of medical men been in existence, it may be safely asserted that the gross evils of abuses of contract medical practice would never have attained the rank growth which characterised them at the time of Mr. Lloyd George's insurance legislation. With the experience of the Insurance Act still galling their shoulders, medical men are reminded that on previous occasions the Legislature has taken advantage of an unorganised profession and thrust upon it the burden of unpaid, yet responsible, service. A standing instance of that kind is the death certicate, which must be signed by the medical practitioner under pains and penalties, but which he is compelled to furnish free of cost. The certificate thus issued by him, it must be borne in mind, constitutes a weighty official document, upon which important issues of descent, inheritance and identification may depend. So important to the community is the principle therein involved, that we find dating from the early days of the Norman dynasty the important office of coroner. Where medical testimony is not forthcoming, it is the duty of the holder of that judicial position to inquire into the cause of death, with the help of a jury. In spite of this State recognition of the vital necessity of identification of bodies and systematic supervision of the cause of death, it provided no fee when, at a later date, the further safeguard of the judicial death certificate was introduced. The medical practitioner from whom the vital part of the document, that is to say, the signature, was demanded, was awarded no fee for his service. So deeply-rooted, indeed, appears to be the attitude of Parliament with regard to the sweating of medical men, that when Mr. Burns brought in his measure for the Early Notification of Births, not only was no fee allowed for the certifying medical attendant, but he was rendered liable to imprisonment if he neglected to furnish the certificate. Manchester has lately adopted that particular Act, and its medical practitioners accordingly become subject to the penal clauses of the Early Notification of Births Act. The situation thus created, as one can readily imagine, is not likely to be stomached by men of the Manchester temperament and more is likely to be heard about the matter. The events of the last few years with regard to the insurance legislation have illustrated the deeply-grained parliamentary habit of sweating the medical profession to the utmost limit. With the medical benefits of the Insurance Act coming into force in January next—that is to say, within the brief space of three and a half months—no satisfactory agreement has been arrived at with regard to the terms offered to medical men. The original bargain offered by the Chancellor of the Exchequer has been contemptuously rejected by the profession. The Government appear to be resolved, on their part, to maintain a sullen silence, and the question has been freely mooted in the newspapers whether there will be enough "blacklegs"—as the phrase goes—to enable Mr. Lloyd George to go behind a hostile profession. The situation thus disclosed is remarkable, and it says much for the mental robustness of a politician who, in view of the comparatively near approach of a General Election, can thus lightly alienate the sympathies of a great and powerful profession, which, by the nature of its work, is brought into daily and hourly contact with all classes of the community, and which regards the conditions imposed upon medical men under the Act with a sense of rankling injustice. Whatever be the upshot of our collective protest, we trust that members of the hospital staffs will not permit their good nature to be imposed upon by the Government. Large numbers of insured persons are certain, as heretofore, to flock to the voluntary medical charities for the treatment of every possible kind of malady. No provision whatever has been made for payment of the medical men whose services are given gratuitously to those institutions. There is one point on which they may enter a strong and effective protest—namely, by refusing to sign any certificate for any hospital patient required for the purposes of the Insurance Act, unless an adequate fee is forthcoming for every such document. The unpaid medical certificate has had its day. It rankles now as a solid grievance that birth, death, and many sickness and other certificates carry no fee. It is indefensible that the State should take advantage of overworked members of honorary hospital staffs to extract from them without fee certificates essential for administrative purposes. On this point of refusal of unpaid certificates, at any rate, it may be hoped that hospital consultants and specialists will be clear, united and emphatic.

CURRENT TOPICS.

The Future of Medicine as a Profession.

The future is a subject about which there can be a considerable and legitimate difference of opinion, and some of the members of the medical profession share with a proportionate number of the members of other learned professions the belief that the best days of professional prosperity are passed. Life differs from logic in that it is difficult to argue from premises unless the conclusion is known, and as yet the conclusion lies in the years ahead. Impelled by a sense of stern duty to parents and students, a prominent Irish surgeon has addressed a letter to the press pointing out that as a result of the Insurance Act Irish students will no longer be able to obtain lucrative practices in England. Between two and three hundred medical men qualify in Ireland each year, and of these not more than half are likely to obtain Government employment. Those who go to England will find that all the industrial workers will be enrolled under other practitioners for insurance purposes, and they will not be able, therefore, to obtain a footing. On the other hand, if free choice of doctor is permitted every three months, there is always a good chance of a new doctor being chosen. Moreover, patients do not always wish to go to the club doctor, neither can they be expected always to stick to the practitioner first chosen. We fail to see that the Insurance Act will cause a great change in the prospects of Irish doctors in England, certainly not a sufficient change to warrant us cutting off the supply of students to any great extent. The new Act must, however, interfere with the sale of practices, and when practices become non-transferable, there will be an opening for the new man. Few people ever consider medicine as a money-making profession, and if the Insurance Bill has not made it more lucrative it cannot be held as yet that it has made it less.

The Persistence of Racial Characteristics.

By the study of any given characteristic, be it mental or physical, we tend to throw some light on the general subject of heredity, and to add another fundamental principle to the science of eugenics. Several papers have been published recently in the New York *Medical Record* on the persistence of certain racial characteristics in the distant offspring of white and coloured people. Kintzing came to the conclusion that there is no positive sign whereby a much diluted strain of negro blood may be discovered. It has long been held that the offspring of even the most attenuated mulatto and a pure white always has some trait, such as a peculiar distribution of pigment around the genitalia, or some peculiarity of the finger nails, which reveals itself to the expert. The conclusions published by Kintzing are interesting in relation to the old laws of the French West Indies. In this region there was an exact legal definition of white and coloured. The offspring of a white and an individual with 1 in 256 negro blood was considered white, and could not be held as a slave. So the empiric reasoning of a hundred years ago is substantiated by the scientific investigation of to-day. If negro characteristics unreinforced by new negro blood thus die out in posterity, it is possible that other undesirable characteristics will also become so attenuated as to be at least beyond recognition. As has been frequently pointed out, Nature tends to eradicate the undesirable elements in mankind and to build up gradually a pure stock.

The efforts of the eugenists should be to help Nature and not to take the process out of Nature's wise hands.

Local Government Board Report.

THE first part of the annual report of the Local Government Board was issued on Friday last. It contains some matters interesting to the medical reader, including statistics, some crude, some more or less digested. The number of insane persons who on January 1st, 1912, were chargeable to Poor Law unions shows a considerable increase. In every year since 1888 the number has been larger than in the previous year. In 1888 the total was 74,090; in 1912 it was 123,149. As so often pointed out, these figures cannot be taken alone to prove that there has been a real increase in mental diseases; they prove only that a greater number of cases have certified under the Poor Law. The report draws special attention to the problem of the feeble-minded. Many boards of guardians recognise the desirability of removing from the workhouses the feeble-minded, the imbeciles, and the epileptics. Many of them agree that combinations of unions could be formed for providing the necessary accommodation. But they fear the expense; they hesitate to take action; or they think that the matter is one for the county authorities to take up. The Colony, which, as was notified in these columns at the time, was established near Birmingham a few years ago, provides accommodation for 252 patients at an average cost of 12s. a week. This institution has proved an unqualified success, and the committee of management contemplate an early extension of the colony, with provision for children. The circular just issued by Mr. J. Burns reminding boards of guardians of their powers in segregation of all classes of workhouse inmates, ought to stimulate activity in this direction.

Medical Men and the Practice of Cosmetics

A CORRESPONDENT in the *Daily Mail* has recently been much exercised because he happened to consult a dermatologist for the removal of some facial blemish, a procedure which the specialist told him he did not undertake. "Is it possible," he asks, "that the medical profession, which is constantly urging the importance of correct surgical procedure and strictest antiseptic precautions for even the slightest operation, is willing to see its patients pass into the hands of unqualified beauty quacks rather than break through its old-time prejudice against treating anything but an absolute disease?" There is little doubt that the medical profession has, in the past, fought shy of treating minor facial defects through some mistaken idea that such practice would be derogatory to their calling. Most skin specialists nowadays fully recognise that the treatment of nævi, moles, superfluous hair, etc., upon the face comes legitimately within their province. Indeed, there are signs on every hand that the art of cosmetics as a branch of dermatology is gradually being reclaimed from the hands of the unscrupulous and unqualified persons who were formerly its chief exponents. It is not too much to say that operations for electrolysis and the manipulation required for treatment by solid carbon dioxide demand as much medical training as the performance of an appendicectomy. Medical practitioners should, therefore, think twice before allowing even a minor portion of their practice to be wrested from them and their knowledge exploited by all sorts of false pretenders to medical skill.

The Dublin Congratulatory Addresses.

ONE of the most interesting functions at the Dublin School of Physic Celebrations last July, was the presentation of congratulatory addresses from various universities and other learned bodies. Owing to the number of these addresses and the stress of time, the addresses were merely handed in, and the public had no opportunity either of reading them, or of admiring their artistic embellishments. The Committee of the Celebrations has, however, arranged to give residents in Dublin, at any rate, the chance of examining these documents, and they have been put on show in convenient order in the School of Anatomy in Trinity College. We understand that the exhibition will be open daily until early in October. Most of the addresses are couched in choice Latin, though a few learned bodies have not been ashamed to use the vernacular. The perusal of the documents is as interesting as the study of their decorative features. Several learned bodies pick out for special mention the names of various of Dublin's great men. Those who stand out pre-eminently are naturally Graves and Stokes, but many others, from Stearne, Dunn, and Cleghorn, down to George Fitzgerald and Daniel Cunningham, receive honourable remembrance.

Swansea Hospital Staff and the Insurance Act.

AT a meeting of the Swansea Hospital Committee last week a strong position was taken up by the consulting and acting medical staff with regard to the Insurance Act. It was stated that they had, with one exception, pledged themselves not to attend insured persons through the service of any voluntary medical charity except in cases of urgent necessity, after the medical benefit under the Act became due and until the profession had approved of the terms which should govern its administration. It was urged on behalf of the staff that the scandal which they wanted to stop, and which for years they had been unable to stop, was the continuance of underpaid contract work. The very class which they were told would be affected if the action of the medical staff were carried into effect were those who for years had been victims of a system which they regarded as deplorable. The medical staff declare that they have seen the results of the underpaid contract work outside the hospital, and feel that though their action may inflict a certain amount of inconvenience, it is nothing compared with the evil which they are trying to bring to an end, and which the Government is seeking now to perpetuate and extend. The staff insist that no work is so bad as sweated work; the terms given throughout the kingdom by friendly societies. Further consideration of the question has been put off until the end of November.

The Ætiology of Pellagra.

Since the day when it was believed that the observations and experiments of Lombroso had demonstrated the causation of pellagra to be due to the consumption of unsound maize, further attempts to arrive at the truth in this reseach have been periodically chronicled in these pages. In 1911 Dr. Sambon and Dr. A. J. Chalmers discovered a new protozoal organism in the brain and spinal cord of a pellagra case, and they also found other minute organisms, possibly related to this parasite, in the blood and cerebro-spinal fluid, and in the liquid from skin lesions in victims of the disease. Through the munificence of Mr. Henry S. Wellcome, who has borne the expenses of all subsequent work, Dr. Sambon and Dr. Chalmers have been enabled to continue their research in Egypt, in Italy, and especially in the islands of the Venetian lagoon. The exact systematic position of the new protozoon and its relation to pellagra are matters which still require further investigation; but a great step has been taken towards the elucidation of the true cause of the disease. It has been proved that the island fishermen contract the disease whilst fishing along the mainland coast, where it is everywhere prevalent. The fishermen gave evidence that from March to May, whilst fishing near the outflows of rivers and streams, they are attacked by minute flies called "mosciolini." This fact has been verified, and the flies in question, *Simuliidæ*, are proved to be abundant in all local rivers and many streams. The immunity of the great bulk of the inhabitants who remain on the islands affords corroborative evidence of the insect-borne origin of the malady, and if this is not yet scientifically demonstrated there is left very little doubt about it. In view of the triumph of practical science in the similar instance of the Panama Canal zone, the extinction of pellagra seems now merely a question of money, of energy and of time. The disease is most prevalent in Italy. The Italian Government has been for many years devoting more and more attention to questions of public health; it will, if called upon, surely provide the further funds needed to carry on to the end a work of such vital importance to its people.

PERSONAL.

The prizes at the Middlesex Hospital will be distributed by Sir Charles Wyndham, M.R.C.S.

Dr. W. S. Lazarus-Barlow will speak on the "Genius of the Infinitely Little," and at the subsequent dinner Dr. H. Campbell Thomson will occupy the chair.

Professor Norman Dalton will preside at the inaugural dinner of King's College Hospital at the Waldorf.

At St. Mary's the Lord Mayor will deliver a short address, and in the evening Dr. W. J. Gow will preside at a dinner at the Prince's Restaurant.

An introductory address on "Common Sense" will be delivered by Miss Jane Walker, M.D., at the London School of Medicine for Women.

The Lord Mayor, Sir Thomas Crosby, is to take the chair at a dinner of old students of St. Thomas's Hospital, to be held at the Hotel Cecil.

In the Great Hall of St. Bartholomew's Hospital a similar dinner is to be held for old students, when the chairman will be Dr. Lewis Jones.

On Prof. Sir Almroth Wright has been conferred the title of Professor in Experimental Pathology in the University of London.

Sir Berkeley Moynihan, F.R.C.S., of Leeds, opened a tuberculosis exhibition in the Town Hall, Huddersfield, last week.

Lieut.-Col. A. E. Tate, R.A.M.C., has been selected for appointment as Honorary Physician to H.E. the Viceroy and Governor-General of the East Indies.

Capt. A. B. Smallman, R.A.M.C., has been selected for appointment as Clinical Pathologist to the Queen Alexandra Military Hospital, London, on the departure of Major J. C. B. Statham.

Dr. George Senter, Lecturer on Chemistry at St. Mary's Medical School, has the distinction of being the only lecturer on that subject appointed Reader of Chemistry in the University of London.

At a recent dinner in honour of the occasion, a handsome silver loving-cup was presented to Dr. Handfield-Jones by the staff of St. Mary's Hospital, to which he has been attached since the year 1874.

At the London Hospital, the Schorstein Memorial Lecture will be delivered by Professor T. Wardrop Griffith. In the evening a dinner will be held at the Savoy Hotel, Mr. Jonathan Hutchinson in the chair.

At St. George's the inaugural address on "The Present Duty of the Medical Citizen" will be delivered by Mr. H. B. Grimsdale. In the evening there will be a dinner at the Prince's Restaurant, at which Dr. F. C. Penrose will preside.

Col. Sir George T. Beatson, K.C.B., M.D., on vacating the appointment of Assistant Director of Medical Services of a Territorial Division, and resigning his commission, is granted permission to retain his rank and to wear the prescribed uniform (dated September 11th, 1912).

On October 2nd the session is to open at the Charing Cross Hospital with a distribution of prizes by the Bishop of Peterborough and Lady Mary Glyn, and, to celebrate the opening at University College Hospital, a dinner is to be held later at the Café Royal, when Sir Rickman J. Godlee, President of the Royal College of Surgeons, will preside.

H.M. the King has given Mr. Robert John Gordon, M.A., M.B., B.Ch.,B.A.O., R.U.I., of the Irish Presbyterian Mission, his authority to wear the insignia of the third class of the Third Grade of the Order of the Double Dragon, conferred upon him by the Emperor of China in recognition of valuable services rendered by him as Plague Prevention Medical Officer at Hulan, Heilungchiang.

H.M. the Queen visited the Royal Hospital for Sick Children, Aberdeen, last week. Sir Alexander Ogston, Honorary Surgeon to the King, and the members of the medical staff of the hospital, had the honour of being presented to Her Majesty.

Lord Strathcona will lay the foundation-stone of the Queen Alexandra wing, which is being erected as part of the scheme to celebrate the jubilee of the British Home and Hospital for Incurables, Streatham, on Saturday, October 19th.

Sir Wm. Turner, K.C.B., F.R.C.S., Principal of Edinburgh University, has been honoured by the Emperor of Germany with the insignia of the Royal Prussian Order of Merit, in the department of science.

FRENCH CLINICAL LECTURE

ON

AN INFECTIOUS DISEASE CHARACTERISED BY JAUNDICE AND A MENINGEAL SYNDROME.

By Dr. GEORGES GUILLAIN,

Professeur Agrege a la Faculte de Medicine de Paris.

[Specially Contributed to this Journal.]

In conjunction with M. Charles Richet *(fils)* I called attention, in 1910 (*a*), to an affection specially characterised by jaundice and a meningeal syndrome, which had not hitherto found a place in our accepted nosology. At that time we searched carefully through the medical literature both of France and of other countries for recorded associations of meningeal and icteric syndrome, but failed to find such co-existence. Accordingly, we were much struck by observing four cases of such coincidence in the summer of 1910; all of which had evolved in almost identical fashion, and all had recovered. Thus it seemed to us interesting to group together those observations of a clinical entity not previously described (*b*).

To our own four cases we have added one observed by MM. Laubry and Foy (*c*), and another by MM. Laubry and Parou (*d*). The former case was that of a man, æt. 27, who presented a meningeal syndrome with cerebro-spinal polynucleosis, accompanied by gastro-intestinal troubles and sub-icterus; the latter was a youth of 17 who also showed a meningeal syndrome with cerebro-spinal lymphocytosis, and accompanied by sub-icterus. It must be noted that neither of these two cases caused loss of colour of the fæces, which was present in the cases which I had observed with M. Charles Richet *(fils)*.

At the same meeting of the *Société Médicale des hôpitaux de Paris*, at which we reported these cases, an epidemic of meningeal derangements, accompanied by clear and non-microbic cerebro-spinal fluid was reported by MM. F. Widal, A. Lemierre, Cotoni, and Kindberg (*e*). The memoir prepared by these authors contains two observations closely analogous to ours. One of them was the case of a man, æt. 30, who presented an infected condition accompanied by a meningeal syndrome and icterus; the latter was fairly well pronounced, and accompanied by choluria and loss of colour of the fæces, and it had appeared at the moment of the fall of temperature and the cessation of meningeal symptoms. The second of their cases was that of a youth of 17 who presented a corresponding condition; but the subicterus of this patient was accompanied by the presence of abnormal pigments in the urine, and lasted but two days (the most acute period of the symptoms). Each of those cases recovered in a few days.

MM. Noël Fiessinger and Sourdel reported to the same society, in March, 1912, a meningeal case accompanied by infective icterus, and on that occasion M. de Massary briefly related the features of an analogous case. Accordingly, there now exists a serial record of cases of the clinical type which formed the subject of our observation in 1910.

The affection described by us has, in all the cases hitherto published, presented a symptomatology almost identical. The onset is usually sudden, and is characterised by headache more or less severe; with pain in the back, prostration, vomiting, and elevation of temperature. When developed, there are two groups of symptoms: meningeal and hepatic. Others are added as the case progresses: Digestive, urinary, and cardiac. The meningeal syndrome is distinguished by headache, which is often extremely violent, rigidity of the neck, nystagmus, and vasomotor lines. Diminution or abolition of patellar reflex developed, but we have never noticed paralysis. In one of the observations published by MM. Widal, Lemierre, Cotoni, and Kindberg, it was noticed that the reflexes of the upper limbs were feeble; in another they were diminished; in the case of MM. Fiessinger and Sourdel they were unaffected; in that of a patient of MM. Loubry and Parou, the patellar reflexes were exaggerated. Lumbar puncture allows the determination of the hypertension of the cerebro-spinal fluid, which remains limpid—sometimes with an increase of albumen, but always with a very distinct cellular reaction, polynuclear or lymphocytary; the polynuclear cells, more or less altered, disappear rapidly; and are replaced by the lymphocytes. The meningeal reaction may persist for many weeks. We have not been able to detect microbes in the cerebro-spinal fluid of any of our patients, either by direct staining, or by ærobic and anærobic cultures. The fluid has remained inactive, too, when inoculated in the mouse, rabbit, and guinea-pig; and even when injected beneath the dura mater of a monkey (*Macacus Cynomologus*). The other observers also failed to find any microbic agent in the cerebro-spinal fluid, except that MM. Noël Fiessinger and Sourdel obtained, by cultures of the blood and cerebro-spinal fluid, a slender bacillus of slight motility which did not take the Gram stain; this bacillus could not be grown on any media, ærobic or anærobic, so that its vitality must have been very feeble. Accordingly, these observers wisely refrained from making any conclusion regarding its pathogenic action.

The icterus usually presents the character of a benign infective type. In our first patients it was fairly intense, with loss of colour of the fæces, cholæmia and choluria; it lasted for a good number of days, and disappeared rapidly. It was, doubtless, hæmatogenous; it was not hæmolytic, but rather an icterus by retention—or, indeed, *with retention*. In the case of the patients of MM. Laubry and Foy and of MM. Laubry and Parou, was not accompanied by loss of colour of the fæces. We have already noted that in the case of one of the patients of MM. Widal, Lemierre, Cotoni, and Kindberg there was choluria and loss of colour of the fæces; and that in their second patient there was merely a subicterus, with abnormal pigments in the urine, which only lasted for 48 hours, and during the most acute stage of the symptoms. In the case observed by MM. Fiessinger and Sourdel, the icterus had graver complications; there was purpura, with diminished coagulability of the blood and non-

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(*a*) *Bulletins et Memoires de la Societe medicale des hopitaux de Paris*, October 28th, 1910.

(*b*) *Le Paris Medical Journal*, 1912.

(*c*) *Ibid.*, October 21st, 1910.

(*d*) *Ibid.*, October 21st, 1910.

(*e*) *Ibid.*, October 28th, 1910.

contractility of the clot; there was also, besides the grave icterus, a very active infective hepatitis; nevertheless, the patient recovered rapidly, as in the cases in which the icterus presented symptoms much less serious. In the observation recorded by M. de Massary, the icterus, in contrast to that of the other cases, was the first sign to appear; it was when convalescence was expected that the meningeal phenomena presented themselves.

There are other indications, besides the meningeal and hepatic ones, which go to show the infective nature of this clinical entity. Fever is always present, and the thermic curves are all of the same type: a rapid ascent to 102° or 104°, followed by a gradual defervescence, reaching the normal in six to eight days. Herpes has often been observed. Examination of the blood has generally shown a slight leucocytosis (polynuclear neutrophiles; 80-90 per cent. polynuclear). Granular *hæmaties* are absent, the globular resistance is normal, and neither auto-hæmolysin nor hetero-hæmolysin is present. Albuminuria was noticed in each of our patients, constant but transitory; a slight disc of albumen was found in the cases recorded by MM. Fiessinger and Sourdel. In one of our patients the cardiac complication looked serious at first; the patient was extremely asthenic, and with a tendency to syncope; there was a condition of embryocardia, with extremely pronounced tachycardia and very low arterial pressure. MM. Fiessinger and Sourdel also noted in their patients: "Heart sounds dull and feeble, with a tendency to embryocardia (115-120 beats per minute). Arterial hypotension appears to be frequent; the asthenia possibly depends on suprarenal trouble. At first, the general condition may seem grave (typhoid aspect, high temperature, hyperpyrexia, meningeal symptoms), but amelioration is soon observed, and the febrile period lasts but from six to eleven days." All our own patients have recovered without visceral complications or any nervous sequelæ, and so also those of the physicians above referred to. In three cases there was a slight relapse at the end of a few days.

The prognosis appears to be favourable, although it is, perhaps, desirable not to express too great confidence. In one of our cases, the cardiac symptoms of bulbar or myocardial origin were really alarming, and might have been fatal; and the hepatic symptoms were grave in the case observed by MM. Fiessinger and Sourdel.

The diagnosis of *Icterus with a Meningeal Syndrome* is easy when we have come to recognise its existence as a clinical entity. Accordingly, we found the diagnosis difficult in our first two cases, but the previous experience made it easy in the later ones. Two of our patients had been sent to hospital with a diagnosis of *cerebro-spinal meningitis.* The onset is, indeed, suggestive of cerebro-spinal meningitis, and we usually thought of this disease first. The results of lumbar puncture establish the absence of the meningo-coccus. The cerebro-spinal fluid remains limpid, and this is comparatively rare in cerebro-spinal meningitis. The meningo-coccus is also easily discoverable in the naso-pharynx in cases of the latter.

It is distinguished from *tubercular meningitis* by the clinical course, the rapid tendency to recovery, and the absence of Koch's bacillus. The clinical course easily distinguishes it from *syphilitic meningitis.* Wassermann's reaction should always be tried, but it must always be remembered that a syphilitic patient may derive the reaction from a source other than meningeal. There are meningeal cases unaccompanied by icterus, to which M. Widal has drawn attention, which are distinguished by the absence of the hepatic syndrome; and the meningeal reaction observed by MM. Widal and Abrami in a fatal case of infective icterus, with uræmia and urea in the blood, differs in every respect from those we are now studying. Of course, the headache, fever, asthenia and digestive disorder which accompany the onset may suggest *influenza, typhoid fever.* a *paratyphoid infection,* or *alimentary intoxication.* In one of the cases above referred to, the medical attendant at first suspected poisoning by tunny fish; and another physician sent the patient to hospital, some days afterwards, with a diagnosis of mucous fever. When the diagnosis is doubtful, recourse should be had to the various laboratory procedures: blood cultures, sero-diagnosis, and hæmatological examination. In some cases the possibility of mushroom poisoning may be suspected. But when the period of coincidence of the icterus and the meningeal syndrome is reached, the diagnosis may be made with certainty.

With regard to ætiology and nosographic position, we must indicate that all the patients were young (18 to 25 years), and were of the male sex. Then, as we pointed out in 1910, we are not dealing with cases of cerebro-spinal meningitis. The presence of the coccus was never revealed by direct examination of the centrifugalised clot of the cerebro-spinal fluid; nor by cultures, or by inoculation. Other observers have had similar experience. Besides, icterus is very rare in cerebro-spinal meningitis; MM. Netter and R. Debre have recently informed us (*La Méningite Cérébro-spinale, Paris,* 1911), that Dr. Besseron (of Algiers) formerly observed this syndrome; but attributed it, not to a cerebro-spinal meningitis, but to the effects of an extremely bilious constitutional condition which then prevailed at Algiers. Icterus has since been observed in cerebro-spinal meningitis. Cassel has reported three cases. We have ourselves observed one.

M. Netter, after the communication of MM. Widal, Lemierre, Cotoni, and Kindberg, and our own, pointed out that the benign meningitis of 1910 sometimes presented a recrudescence corresponding to that of poliomyelitis. I do not, however, believe that the *icterus with a meningeal syndrome* falls under the heading of the disease of Heine-Medin. None of our patients showed paralysis, either medullary or bulbo-ponto-peduncular. Poliomyelitis may, indeed, accompany any visceral disorder; but, so far as we know, the association of icterus with symptoms indicative of lesion of the neural axis has not been recorded in epidemics of poliomyelitis. With regard to the epidemic of meningeal conditions associated with clear cerebro-spinal fluid free from microbes, we have the testimony of MM. Widal, Lemierre, Cotoni, and Kindberg: "Epidemic poliomyelitis seems to us to be without assignable cause. None of our patients have shown any trace of paralysis; besides, we have never observed at Cochin any except isolated and very rare cases of poliomyelitis, the latest dating from four years." The patient recently observed by M. de Massary belonged to a part of Paris where no epidemic of either cerebro-spinal meningitis or poliomyelitis existed, and M. de Massary adds: "The question of epidemicity, which was raised by M. Netter after the communication made by MM. Guillain and Charles Richet (*fils*) in October, 1910, should not, then, be raised in connection with this last case."

Icterus with a meningeal syndrome appears to be contagious. One of the patients whom I observed with M. Charles Richet (*fils*) worked in the same room with another artisan who was similarly affected; whose case was reported by MM. Widal, Lemierre, Cotoni, and Kindberg. We found on inquiry that this patient had replaced the other, and had actually used his tools. These cases have, perhaps, some relation to those of benign meningitis referred to by the various authors mentioned, and also by MM. Rist and Rolland. In discussing our communication, M. Rist observed that he had been greatly struck in the summer of 1910 by noticing, at the same time as the occurrence of a number of cases of benign acute meningitis, an unusual number of benign cases of infective icterus by retention. "I had not dreamed," said he, "of establishing a connective bond between these cases of icterus and those of meningitis of which I spoke the other day, but the observations of M. Guillain are very suggestive in this regard."

In summarising, I would say that there seems to exist among the benign forms of meningitis, the meningeal conditions to which M. Widal has called attention, a special clinical type which deserves to be individualised; this is characterised by the association of a meningeal syndrome and an icteric syndrome. The infection which produces the *icterus with meningeal syndrome* would seem to be a septicæmia. This septicæmia may affect the heart, the lungs, or the suprarenal capsules, but it specially determines hepatic and meningeal troubles —troubles apparently serious, but which, in every case hitherto recognised, have terminated in recovery.

Not knowing the microbic agent which determines the genesis of this disease, we are unable to oppose it with a pathogenic therapeusis. But, apparently, this *icterus with a meningeal syndrome* may be cured without medicaments. Lumbar puncture is useful for diminishing the hypertension of the cerebro-spinal fluid, for removing a fluid which is surely injurious to the neural axis, and for modifying the meningeal circulation.

Urotropin, benzoate and salicylate of sodium, aspirin, salts of quinine are medicaments which have an influence on general infection, and especially in case of hepatic localisation. Cold lavements are of real benefit during the icteric phase. Adrenalin does great service when the blood-pressure is low, and suprarenal trouble appears to exist. In the grave infective conditions, I would advise the use of collargol and electrargol. It is, however, useless to give a patient too many drugs, for "icterus with a meningeal syndrome" habitually tends to a spontaneous cure.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal The lecture for next week will be by H. L. McKisack, M.D., M.R.C.P., Physician to the Royal Victoria Hospital, Belfast. Subject: "Syphilis of the Nervous System; Illustrated by Three Cases."*

ORIGINAL PAPERS.

ON A CASE OF MIGRATION OF THE CÆCUM PRODUCING OBSTRUCTION OF THE ASCENDING COLON.

By SIR JOHN BLAND-SUTTON, F.R.C.S., Eng.,
Surgeon to the Middlesex Hospital.
FROM NOTES BY SOMERVILLE HASTINGS, F.R.C.S., Eng.,
Formerly Surgical Registrar to the Middlesex Hospital.

I was interested in Mr. Gordon Taylor's admirable article on "Volvulus of the Small Intestine" in the Archives of the Middlesex Hospital (Clinical Series, No. X., p. 45), because one of these dangerous cases of volvulus in which the small intestine, cæcum, and ascending colon are slung on a common mesentery came under my observation in the hospital in 1908. I was puzzled by it, and published a description of the case in the *Lancet* (1908, vol. i., p. 1837). By a singular mischance when the index was prepared the reference to it was omitted. On these grounds I venture to reprint it.

The following is the reprint of my article:—

"When the cæcum is provided with a long mesocæcum it may lie in any region of the abdomen; perhaps the most unusual situation for a displaced cæcum to occupy is the left kidney pouch, behind the mesentery. When a cæcum migrates in this way it gives rise to a puzzling set of symptoms, as the following case will serve to illustrate:—

"A poorly nourished man, 48 years of age, came under my care in the Middlesex Hospital for abdominal pain and vomiting. A week before admission he had been seized suddenly with griping pains in the abdomen, particularly on the right side; these were sufficiently severe to confine him to bed, and were followed by anorexia and vomiting. The vomit was bile-stained and watery. On admission the abdomen was somewhat distended, but moved evenly on respiration; no tumour could be felt, and there was not much tenderness. The temperature ranged about 100° F. As these signs indicated the existence of intestinal obstruction, cœliotomy was performed. On making a free median incision several ounces of purulent fluid escaped and the intestines appeared inflamed and moderately distended. Attention was first directed to the right iliac fossa, but the cæcum and appendix were not there. A tense band of gut extended from the right extremity of the mesentery upwards and to the left, overlapped by mesentery and coils of small intestine; when traced upwards it led to the ileo-cæcal junction in the left kidney pouch. A loop, consisting of the last few inches of the ileum and the ascending colon with the cæcum and appendix, had been twisted on its own axis through half a circle and displaced upwards and to the left. The cæcum had become adherent in its new situation, and when drawn down a large necrotic area with two perforations was seen, through which liquid fæces issued. The necrotic area was excised, and the edges of the hole thus made in the gut were approximated with sutures. The free fluid in the abdomen was swabbed out, a large rubber tube was introduced into the pelvis, and the incision was closed with silk sutures. The man died 16 hours after the operation.

[The relations of the parts were identical with those represented in Fig. 4, p. 55, of Mr. Gordon Taylor's article.]

"The patient whose clinical history and fate I have described came under my observation in October, 1906. I was interested and much puzzled by the condition found at the operation; my interest was increased by reading a valuable contribution by Mr. Jonathan Hutchinson, jun., on 'Volvulus of the Entire Small Intestine and Ascending Colon.' This communication was founded on a case which is in its leading features like the one which I have endeavoured to describe, but Mr. Hutchinson fortunately saved his patient; he also made his paper valuable by furnishing an analysis of nine other similar cases of volvulus. Mr. Harold W. Wilson has since published an account of a case of migration of the cæcum producing obstruction of the ascending colon which occurred in St. Bartholomew's Hospital in the practice of Mr. Harrison Cripps, which resembles my case in its main features.

"This complication connected with the cæcum is worth the attention of surgeons, as descriptions of it are not to be found even in monographs dealing with intestinal obstruction. Its importance is obvious from the fact that the majority of the patients in whom it has occurred have died. Judging from a study of the recorded cases it would appear that the chief variations in the degree of the displacement depend upon the extent to which the twist or rotation involves the mesentery. For example, the extreme condition occurs in patients in whom the intestines, including the third part of the duodenum, the cæcum, and ascending colon, are attached to a common mesentery. When such an anatomical condition exists, and it is a recognised anomaly, the whole of the small intestines, the cæcum, and ascending colon may be concerned in the volvulus. In my patient the parts implicated included the terminal 12 inches of the ileum, the cæcum with the vermiform appendix, and half the ascending colon. The condition of the third portion of the duodenum was not noted either at the operation or post-mortem. During the operation the absence of the cæcum from the right iliac fossa was detected as soon as the abdomen was opened, because it is with me a matter of routine in operations for intestinal obstruction to ascertain the condition of the cæcum as the primary step after exposing the abdominal viscera.

"I think the fatal nature of this form of volvulus is mainly due to delay on the part of hospital patients in seeking advice. The signs are not so urgent as in acute obstruction of the small intestine, and when the patients are admitted the obstruction may not be absolute, for enemata bring away small quantities of flatus. Abdominal distension is not a marked feature. In the case under my own care the diagnosis seemed to lie for the first few hours between perforation of the appendix and intestinal obstruction; then the indications of obstruction prevailed. The signs of perforation were not counterfeit, for, as has already been mentioned, there were two holes in the wall of the cæcum. The man was gravely ill at the very hour of his admission."

Since studying this case I have examined the disposition of the cæcum carefully when performing pelvic operations, and have found that the predisposing condition, which allows the cæcum to pass behind the mesentery and lodge in the left kidney pouch, is by no means uncommon, and I have often demonstrated it in the operating theatre to those assisting at or witnessing operations.

Mr. Gordon Taylor made his article more useful by collecting reports of cases in which patients had recovered after the removal of more than six feet of small intestine. I add two to his series.

In 1905 I was asked one midnight to see a woman who had been curetted eight hours previously with the hope of relieving painful menstruation. In the course of the operation the uterus was perforated by a dilator, and a coil of ileum protruded through the hole. The medical attendant thought this was a product of conception and withdrew more than six feet of intestine. He cut off one end and forcibly pulled out the other, and returned the patient to bed, thinking she would quickly die. At midnight he recovered his presence of mind and asked me to help him. I opened the abdomen, swabbed out the effused blood, closed the rent in the uterus, resected that portion of the mesentery which had been deprived of intestine, and joined the cut end of the ileum into the cæcum at the ileo-cæcal valve, for the ileum had been torn out of the cæcum. The patient recovered. I saw her six years afterwards in excellent health and quite ignorant of the nature of the serious ordeal through which she had passed.

These facts prove, if any facts were needed, that the loss of a long segment of ileum does not seriously impair the health of the individual.

Some years ago Mr. F. J. Shepherd, Professor of Surgery, McGill College, Montreal, showed me a large globular tumour weighing eight pounds which he had removed from the mesentery of a Newfoundland fisherman, æt. 28. The extirpation of the tumour involved the resection of nearly eight feet of small intestine. Three years later, and one week previous to my visit to Montreal, the patient had reported himself at the hospital in robust health.

AN INQUIRY INTO THE CAUSES OF FAILURE OF X-RAY TREATMENT IN DEEP-SEATED CANCER. (*a*)

By FRANCIS HERNAMAN-JOHNSON,
M.D.Aberd.,
Darlington.

Much may be learned in an inquiry of this nature by a study of rodent ulcer. It is easy to cause the disappearance of a rodent; difficult to prevent relapse. Relapse is commonly believed to be due to the fact that some of the deeper malignant cells have not been killed; until we can learn how to destroy such cells at a depth of a few millimetres, it is useless to look for success in visceral cancer.

In the first place, why do X-rays cause a rodent to heal even temporarily? The usual theory is this: X-rays are, to a certain extent, injurious to all cells. Malignant cells are of lower vitality than normal cells; hence, a dose from which normal cells will recover will prove fatal to cancer cells. The action is thus held to be similar to that of carbon-dioxide snow; or, as Dr. Bashford put it in an article now famous through the daily press, X-rays and radium are the best caustics known, but still, simply caustics. Such a view is worthy of the days when all the phenomena of absorption and secretion were held to be explicable by the ordinary laws of diffusion and osmosis. No known caustic can produce at one and the same time stimulation and depression; yet this is accomplished by X-rays. In the case of a chronic varicose ulcer, we see an action wholly stimulating. A surface epithelioma not yet ulcerated shows under rays a gradual absorption, chiefly due to depression and death of malignant cells. A healing rodent displays to us both these processes simultaneously—destruction of cancer cells proceeding coincidently with increased activity of normal epithelial and connective tissue elements.

If we accept the biological view of the cancer cell, regarding it as a reversion to an earlier type, its behaviour under Röntgen irradiation is seen to be only what might be expected from what we know of the effects of radio-activity on cell-life in general. Röntgen rays, even in minute doses, are injurious to young cells, or to cells retaining the peculiarities of extreme youth. Now the cancer cell is a cell which has resumed certain embryonic characteristics. It has become simple in structure and function, tends to divide and subdivide with great rapidity, and, like the fertilised ovum from which it sprang, seeks to live upon its immediate surroundings. According to the views of Mr. Hastings Gilford, as set forth in a recent work, (1) such cells are the subjects of a regressive variation. They are prematurely senile, and therefore present a kind of anarchic caricature of their infancy. Why X-rays should be destructive to embryonic cells it is not my purpose to discuss; but it is because the cancer cell is of this type that the X-ray seeks it out amid its normal brethren—seeks it as definitely as quinine does the parasite of malaria, or mercury the spirochæte of syphilis. Quinine, if too much is given, will kill the patient, as also will mercury; yet we do not therefore deny the selective action of these remedies on the causative organism of malaria and

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(*a*) Read before the Section of Electro-Therapeutics, British Medical Association Annual Meeting, Liverpool, 1912.

syphilis. Absolute selection does not exist in medicine; but the action of X-rays on embryonic cells is truly selective as any known to therapeutics.

I have dwelt on this theory of reversion to embryonic type because it seems to me that it furnishes us with a clue to the therapeutic action of X-rays in cancer, rheumatoid arthritis, spinal cord degenerations, leucæmia, and other maladies classed by Gilford among "Disorders of Post-natal Growth and Development." Not only has it enabled me to fortify an instinctive belief in the selective action of X-rays by sound biological arguments, but it has also allowed me to banish from my mind the fear of actually stimulating deep-lying malignant cells by insufficient dosage. This has been suggested as a possible cause of failure by well-known authorities, notably Professor Rowntree. (2) That moderate doses of X-rays have a stimulating effect on normal tissues is, fortunately, beyond doubt; but it does not follow that even very small doses will have a similar effect on malignant cells. Approaching the matter from a clinical side, I have endeavoured to determine the smallest dose of rays which would benefit a rodent ulcer; and I have seen distinct improvement from the employment of only one-fifth of a milliampère of secondary current for seven minutes twice weekly, the anticathode being 25 c.m. from the skin. Biological experiment also tends to discredit the deep-stimulation theory as an explanation of therapeutic failure. Dr. J. F. Gaskell, in the course of a paper read last year before the Royal Society, (3) states that even very small doses of X-rays have a retarding effect on the cell mitosis of developing chicks. It is true that a chronic Röntgen dermatitis may become malignant, but in this case the skin is first broken; the influences at work are not limited to X-rays, and bacterial toxins may in reality be the exciting cause. On the whole, it appears fairly evident that the Röntgen dosage received by the deeper parts of a tumour, though it may not be enough altogether to inhibit the growth of cancer cells, certainly does not increase their vitality.

In every case of rodent ulcer which heals satisfactorily on the surface, it is probable that the superficial cancerous tissue has been killed, and sufficient rays have reached the deeper malignant cells to hold their proliferating activity in check during the actual course of treatment. But in many instances the dosage received is insufficient actually to kill these cells, and relapse inevitably follows. That the mitosis of embryonic cells can be inhibited for long periods without permanently damaging them is a matter beyond doubt. Dr. Gaskell, in the paper above referred to, tells us that for each day of development there is a certain "critical dose" which kills the embryo; whereas from anything less than this it will, in time, recover. This critical dose varies with what is known as the *Mitotic index*, this being the number of divisions per 1,000 cells occurring in a given time. As the index diminishes, so does the critical dose. Instances are on record of radiologists who have been sterile for months or years, (4) but who have quickly recovered so soon as they took proper measures of protection. Moreover, even with deliberate intention, it is often difficult or impossible permanently to sterilise women not near the menopause.

If I am right in believing that X-rays depress cancer cells because they have become embryonic in type, then the above quoted experiments and observations may help to explain the cause of failure or relapse in some cases of cancer. We shall not, I think, exceed the bonds of legitimate hypothesis if we assume that for the cells of any given tumour there exists a critical dosage of X-rays from which they are unable to recover. This dosage will vary according to the mitotic index of the growth concerned. The mitotic index, again, will differ in various tumours, even such as closely resemble each other from a clinical standpoint, and will not remain a constant even for the same tumour. I use the term "critical dosage" rather than "critical dose," because the amount need not necessarily be all delivered at one sitting; whichever term is used, the idea to be conveyed is one of definite quantity within a definite time. Thus, the determination of the number, strength, and frequency of Irradiations is seen to be a matter of the utmost importance. *For a dosage below that which is critical for the cells of a given tumour will never kill these cells, no matter if it be administered for months, or even years.*

To treat a rodent ulcer with unfiltered rays from a medium tube is to invite failure. For the surface receives a bombardment wholly disproportionate to that sustained by the deeper layers. Not only are numerous soft rays emitted from the anticathode, but a vast number of *adventitious primaries* are given off as a result of electrons striking on the glass of the bulb. All these are highly active physiologically within narrow limits, and, as a consequence, the ulcer heals rapidly on the surface. Cessation of treatment will almost certainly be followed by relapse; while persistence will result in surface irritation.

No case of rodent ulcer should relapse because the deeper layers have received a relatively feeble dose of rays. Bulbs can be obtained whose radiation, after being filtered through 2 mms. of aluminium, will penetrate at least 3 to 4 cms. of tissue before falling half value, and they can be excited by any good modern coil worked from the main. The fall in value at a depth of 1 cm. is so trifling that it may be disregarded. For the past year I have employed in the treatment of rodent ulcer hard filtered rays intensified by the specific secondary radiation from silver or zinc, and am well pleased with the results so far; but it is as yet much too early to form any conclusion as to whether this modified *technique* materially reduces the tendency to relapse. In the meantime, I am not unmindful of the possibility that, even though we convey a critical dose of rays to every cancer cell in a given tumour, we may not thereby cure the disease. For it is conceivable that, at any rate in a proportion of cases, some irritant remains which continually provokes fresh normal cells to premature senile degeneration.

To attack the problem of the treament of deep-seated cancer by observations on rodent ulcer is open to anyone possessing an X-Ray apparatus. Another method, recently made possible by the success of Carrel and Burrows in the growing of human tissues *in vitro*, requires the collaboration of a skilled pathologist. By the irradiation of living neoplasms under experimental conditions outside the body, we should be able to ascertain :—

(1) The minimum dosage required permanently to stop growth.

(2) Whether recovery is complete from any dosage less than this.

(3) Whether the minimum dosage varies according to the rate of growth.

Put in other words, does there exist for all malignant tumours a "Critical Dosage," and, if so, is it determined in every case by the "mitotic index" of the tumour concerned.

By the coincident exposure to X-Rays of normal tissues and their malignant derivatives it may be possible to obtain direct experimental proof of specific vulnerability in cancer cells. From this it is but a step to the determination of the maximum depth at which an efficient dose can be delivered without permanent injury to superjacent healthy structures.

Meanwhile, we, as physicians practising a speciality, are called on to do our best for inoperable, or recurrent, cases of internal cancer. Knowing what we do of the relative susceptibility of the cancer cell to X-Rays, we may assume that a dose equal to half, or even one-quarter, the maximum which can be tolerated by the integument is still effective as a depressant to such cells. Existing methods enable us to give this amount at a depth of between 3 or 4 cms., even when only one skin path is available. But we may often reach a deep-seated lesion by two or more such paths. It is my own practice to irradiate with two tubes connected in parallel, and so placed that their normal rays either meet at right angles or are in opposition. A "cross-fire" effect is thus obtained. The anticathode should be not less than 35 or 40 cms. from the surface of the body, so that for practical purposes we may disregard loss of energy owing to divergence of the incident rays after they enter the tissues.

In treating rodent ulcers we can look out for and deal with small relapses, and there is little likelihood of dissemination. But in cancers of the viscera we cannot see what is going on, and it is, therefore, necessary always to give the largest amount of X-Rays which the skin will stand. *The risk of metastasis can be forestalled only by a careful study of the sites peculiar to each form of cancer, and by their prophylactic irradiation.*

When very stout subjects are concerned, the hardest existing bulb is not always capable ol delivering an effective dose to an internal tumour without grave injury to the skin. We must, therefore, demand from the makers an increase in the penetrative power of their tubes. We should aim at a penetration at least double the maximum now attainable.

Rays of such extreme hardness can be utilised to the best advantage only by converting their energy at the site of the lesion. Secondary ray therapy, at present only in its infancy, may eventually enable us to do this effectively. At present we are quite unable to irradiate, say, a gastric carcinoma as freely as a rodent ulcer; until we can do so with safety to the intervening structures X-Rays, *per se*, cannot be said to have been given a fair chance in deep-seated cancer.

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THE VACUM ELECTRODE IN NEVRODERMITE. (*a*)

By J. GOODWIN TOMKINSON, M.D.,

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In recent years the curative and palliative value of X-rays and of radium in certain itching affections has been recognised, but the application of these potent physical agents is not invariably successful. The value of high frequency currents in pruritic conditions has not, in my opinion, received that general recognition which it deserves. My attention was directed some years ago to their use by Lacapère in the out-patient department of L'Hôpital Saint Louis.

The first case in which I employed the vacuum electrode for the relief of localised intense itching was one of pruritis ani. The patient was a man in the early prime of life. The condition had become chronic, and was markedly rebellious to ordinary therapeutic measures. I think I am justified in regarding the condition as permanently cured, for after a slight relapse, nine months after the first course of treatment, I have not been again consulted by the patient.

Professor Gaucher, in volume XIV. of the "Nouveau Traité de Médecine et de Thérapeutique" (Brouardel et Troinot), says: "L'application des courants de haute fréquence est aussi un excellent mode de traitement du lichen simplex chronique, comme d'ailleurs de tous les épaississements lichénoïdes de la peau."

In the affection variously described as lichen simplex chronicus, Névrodermite, etc., the most arresting clinical feature is that form of induration to which the names *lichenification* and *lichenisation* have been given by the French school. The accompanying itching is of severe type, often very intense, and doubtless is the most frequent cause of the patient's seeking medical advice. The first case of this kind in which I employed the vacuum electrode was that of a young miner. The lesion was situated in the lumbo-sacral region. An ointment of salicylic acid and oil of cade was applied daily, and the vacuum electrode once weekly. The itching soon yielded to the treatment, and in several weeks the plaque disappeared. The patient has not again sought relief.

My second case was that of an East India merchant, about 40 years of age, who had several plaques about the region of the neck and shoulders and a keratotic condition of both palms. It may be mentioned that I had previously treated his son—a boy about 5 years of age—for xerodermia. The patient was in a depressed condition, having recently lost his wife. During the local treatment he took from time to time such tonics as iron, arsenic, and strychnine. Various preparations of salicylic acid and oil of cade, etc., were employed locally, and eventually ointments of these drugs and accompanying treatment with the glass electrode of low vacuum. The condition was somewhat rebellious to treatment, but ultimately all the body lesions disappeared. The X-rays, however, with boric acid wet dressings proved the most effective in dealing with the palmar condition.

My last case was that of a French lady. Nearly the whole of the neck was encircled by the lesion, which also extended on to the right mastoid area.

Previous to consulting me she had had X-ray and radium treatment, and, judging from the telangiectasis which had replaced portions of the lesion, the treatment had been somewhat heroic. The local treatment consisted of a salicylic acid and oil of cade ointment—the strength of which was progressively increased—and three vacuum electrode séances weekly. At the commencement of treatment the itching was decidedly distressing, seriously disturbing the patient's rest. It was, however, rapidly alleviated after a few applications of the electrode, and somewhat later the induration began to disappear. The patient is now on a visit to the south of France, and at the time of leaving was almost well. Unfortunately the telangiectases persist. It might be suggested that the induration was part of the result of irradiation. It was, however, undoubtedly that clinical variety known as lichenification, and not the keratotic condition resulting from excessive irradiation. The general treatment consisted of careful regulation of the diet, the exhi-

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(*a*) Abstract of paper read before the Dermatological Section of the British Medical Association, July, 1912.

bition of alkalies, and the free drinking of Vichy water.

To sum up, careful regulation of the diet, the adoption of that mode of medical treatment suggested by the general condition of the patient, together with the use of ointments of salicylic acid and oil of cade in progressively increasing strength and the application—sufficient to produce a transitory erythema—of a low vacuum electrode twice or thrice weekly, will, I believe, in most, if not all, instances clear up the condition.

PRELIMINARY LARYNGOTOMY IN OPERATIONS UPON THE TONGUE.

By G. P. NEWBOLT, F.R.C.S.Eng.,
Hon. Surgeon, Royal Southern Hospital, Liverpool.

It is only after carefully noting the results of his work for several years that a surgeon decides on a definite plan of action. If we take up a surgical treatise and read the accounts of the different operations performed on the tongue, for instance, the result of our study will most probably be absolute confusion; and the same remark applies to the descriptions of operations on the rectum, to gynæcological operations, and to operations for hernia, cleft palate, etc. It is only after we have performed the various operations described that we come to a definite conclusion. Unfortunately, cases of malignant disease of the tongue coming to the hospital out-patient room are usually seen in the later stages, and any operation which is performed must be of an extensive nature. If these cases are to be operated upon with any chance of success, it is essential that the surgeon should see what he is doing, so that he may cut widely beyond the growth. If the operation field is obscured by hæmorrhage, or if the anæsthetist gets in the way, he cannot do this. It is no good doing a brilliant operation on a case of malignant disease of the tongue; for if a portion of the disease is left behind, the operation had better never have been done. Again, there is great danger of blood getting down the trachea and setting up a condition of septic pneumonia. How, then, can we best avoid these occurrences? This question has been answered by one of our leading authorities, Sir H. Butlin, for he, I believe, nearly invariably did a preliminary laryngotomy in cases of extensive operations on the tongue. What are the advantages claimed for this method of operating? They are the following:—

(1) The surgeon can see exactly what he is doing, and there is no need to hurry.

(2) No blood gets down the larynx.

(3) The anæsthetist is not in the surgeon's way.

(4) It is not necessary to have a skilled anæsthetist, though he is always to be preferred.

During the last four or five years I have done a good many operations on the tongue and jaws, and in the majority of these have performed preliminary laryngotomy. I may as well say at once that I do not advocate this operation in early cases of cancer of the tongue, where the growth is well forward and easy to get at.

The operation is a simple one to perform after an experience of two or three cases.

Having marked the thyroid prominence and the cricoid cartilage, a median incision is made of about an inch long. The sterno-thyroid muscles are separated, and a vessel may or may not need securing. The crico-thyroid membrane is next exposed, and the knife entered transversely and close to the upper edge of the cricoid cartilage so as to avoid the crico-thyroid vessels. The dilators are put in and the points turned upwards; on opening the blades it is easy to slip the laryngotomy tube in below them. A silk-worm gut suture on either side fixes the tube, and two in the skin, passed deeply, control any superficial bleeding and also hold the tube. In doing this operation it is necessary to open the larynx with the quick thrust of a sharp knife, otherwise the mucous membrane will be pushed in front and will give trouble. At first I used two sharp probes pushed through and then separated, and this is the plan adopted by Sir H. Butlin. In one case I divided a small branch of the crico-thyroid artery which ran directly downwards, but I was able to secure it at once; and I have notched the cricoid cartilage; but since the knife has been lateralised I have had very little trouble, even in patients with very thick necks. The tube can be removed directly the operation is completed, or some hours or days later. Generally speaking, I remove it the following morning. The wound heals without much trouble if carefully dressed. The anæsthetist can now take his position away from the mouth, and the surgeon has the field to himself. Chloroform is given on a piece of lint held over the laryngotomy tube. The tongue having been drawn forward, the string sponge is placed well down the fauces, and no blood is likely to descend into the trachea. The growth on the tongue is removed with scissors, vessels secured, and the parts examined, more tissue being removed if necessary —and it is sometimes necessary. I maintain, then, that the best way of operating on extensive malignant disease of the tongue is by doing a preliminary laryngotomy and removing the growth with scissors. The one exception I make is where the growth is so far back that the sponge plugging the fauces cannot be placed, and here I should do a high tracheotomy and plug the trachea, or use a Hahn's tube. We now come to another condition—that of malignant disease of the upper jaw. In removal of the upper jaw the hæmorrhage is usually very profuse; the patient is better in the elevated position, and it is essential for the surgeon to see what he is doing. With the aid of the laryngotomy the anæsthetist is removed from the field of operation, and the growth is excised more readily. In some very hæmorrhagic cases plugging the cavity left by the removal of the jaw may be necessary, and the tube can be left in the larynx until the plugs are removed. In a desperate case which I operated upon lately, the question arose whether the patient would stand the operation, as she was anæmic and feeble. I did a preliminary laryngotomy, and also exposed and clamped her common carotid on the side of the disease; by these methods her upper jaw was removed with success. Had they not been adopted, I feel sure she would not have left the table alive. Of course, I have operated without taking these precautions. I removed the left upper jaw from a patient who was suffering from malignant polypi affecting the antrum and nostril some eleven years ago. No laryngotomy was done, and this patient is still quite well, and was seen the other day by the dentist who makes his plates.

A very unfortunate case was one in which the patient had an epithelioma involving his soft palate. He was given chloroform through a Junker's inhaler. The apparatus, however, was not working properly, and he received a dose of pure chloroform down his larynx. The anæsthetic was at once stopped and he was inverted, but symptoms of acute inflammation of his lungs came on, and he died forty-eight hours after operation. *Post mortem* there were gangrenous patches in the right lung, evidently due to the direct irritation of the chloroform. Had preliminary laryngotomy been performed this would never have happened. The growth was easily removed with a pair of scissors. I may here introduce the argument that a hasty laryngotomy has been done many times in cases in which the preliminary operation would have saved the patient from running a great risk or even from death. Erichsen says, "The most serious accident is when the gag slips whilst free hæmorrhage is going on. In a case of this kind I had to perform laryngotomy, as a coagulum formed in the pharynx before the vessel could be secured." Again, when the whole tongue is removed, the laryngotomy saves the patient from the risk of the stump falling back, and from the agony of having it forcibly pulled forward; even if the tube is left in for two or three days no harm results. Though a strong advocate of this method of operating, I have tried all the others except the trans-hyoid pharyngotomy advocated by Carless. One of the best results I ever had was that of removing the right half of the tongue with scissors after a preliminary ligature of the lingual on the same side. On the fifth day this patient had a sharp secondary hæmorrhage in the early morning, apparently from his ascending pharyngeal artery. I cut down and tied his external carotid, at the same time removing some glands I came across. This man is still well, I believe, and it is nine years since his operation.

A word about hæmorrhage. This may occur at the time of operation or afterwards. In the first instance, it can be controlled by drawing the tongue forward by means of the silk, or by pressing it forward with a finger placed behind the root. In two cases I have had of reactionary hæmorrhage occurring after the return of the patient to the ward, one required ligature of the external carotid, and in the other the bleeding was stopped by fixing a gauze pack along the floor of the mouth and sewing the tongue over it to the side of the jaw. A solution of adrenalin will stop oozing from the cut surface. I have mentioned the case of secondary hæmorrhage in which I tied the external carotid. I do not believe in ligature of the linguals before removing the tongue, because I had hæmorrhage after it, and the laryngotomy renders it unnecessary. The only time I should think of doing it would be if I was removing the glands first.

I now propose considering some of the methods advocated for removal of cancer of the tongue, and the first I shall deal with is that of splitting the cheek in order to expose a growth in the posterior part of the tongue. I have performed this operation several times, and have also combined it with a laryngotomy. In one case, on account of the contraction of the man's mouth caused by a burn, it was impossible to operate in any other way. This method gives a good exposure, but leaves an ugly scar. There is the danger of infection of the wound, and in one of my cases a growth appeared in the divided cheek. I remember the same thing occurring in a case under my care many years ago. Splitting the jaw in the middle line gives good access to growths at the anterior part of the tongue. This operation, which is commonly known as Syme's operation, is, however, a very severe one, and there are a great many objections to it from my point of view. In the first place, I have found that the hæmorrhage is just as troublesome as when the scissors alone are used. In the second place, there may be and often is trouble with the divided jaw; it may be that it does not unite, there may be necrosis, and, worst of all, the growth may develop in the divided jaw. I had a case of this sort in my own practice, and a big tumour formed in the anterior portion of the jaw, though there was no recurrence in the tongue or floor of the mouth. I lost a patient from this operation on the eighth day. The man suffered from profound shock at the time of operation, and though he rallied to some extent he showed no promise of getting well. I understand that Professor Kocher adopts this method now almost invariably, having given up his original operation. This consisted in a dissection of the submaxillary region, with removal of the submaxillary and the lymphatic glands, the diseased half of the tongue being removed through the mouth or through the opening thus made into the floor of the mouth. The advantage claimed was the removal of the disease at one sitting, but this was counterbalanced by the risk of infection of the wound. The fact that its originator has given it up is sufficient to condemn it, and, after doing it several times, I came to the conclusion that other methods were better.

As things are at present, I have no doubt that if cancer of the tongue is seen at its early stage when it can be widely excised, and if the glands on the same side of the neck are also removed, the patient has a good chance of remaining well for some years at least.

There is still some difficulty in persuading patients to undergo the second stage of the operation. The tongue having been removed, they usually want to put the second operation off, naturally concluding that it will be as painful as the first was; and, as there is no doubt that excising of the tongue or a portion of it is a very painful operation, one is not surprised at this. The question of doing both stages at once, I think, may be put out of court, as it adds to the risk, and the glands will probably not be thoroughly removed.

I have removed the glands before doing the operation on the tongue, but patients do not like it, and will often refuse to have it done. In one case in which I performed it, the man only worried until the tongue operation was completed, and he was quite unable to understand why his neck had been operated upon. If the glands are at all palpable, especially in the superior carotid region, it is an open question whether much good will be done, and the cases in which they cannot be felt at all are those in which the operation is chiefly indicated. Practically I have found that the submental and submaxillary glands can be well cleared, but when the glands lying on the carotid and running up to the parotid region are involved, very little chance of dissecting them out remains. The internal jugular vein has often to be cleared away, the pneumo-gastric nerve can usually be separated, but in spite of the fact that arteries are not supposed to be involved, this is not always the case. Now, though the carotids may be treated with scant ceremony in young people, it is not so with elderly individuals like those often attacked by cancer. In one man I had either to remove a piece of his common carotid or leave the growth. I tied the carotid and removed the growth, but he got cerebral thrombosis with paralysis of the opposite side, from which he died. This was a case in which an epithelioma had been removed from the lip two years previously. In another case occurring in a young man who desired to have a mass of malignant glands removed from the left side of his neck, having pointed out the risk, I cut the growth away, with the artery, vein, and nerve, all being involved in the growth. Beyond some hoarseness he suffered very little inconvenience, and made a good recovery from the operation, though it is not probable that he will live for any length of time, as it was a recurrent growth when I operated. In a patient, æt. 41, I tied the right common carotid and internal jugular vein, and cleared the glands from that side of the neck on June 30th, 1910. On March 9th, 1911, I cleared the left side of the neck, tying the internal jugular vein. No bad symptoms followed, but the growth returned in the side of his pharynx. One can only look upon these cases of cancer occurring in men of forty as peculiarly hopeless. Again, when there is a big ulcer on the floor of the mouth, it is often very difficult to make out the extent of the disease until the patient is under an anæsthetic. I have a man under my care at present whose growth seemed inoperable until the parts were relaxed, when I found that there was a space between the jaw and the growth, a point one could not ascertain beforehand on account of the extreme tenderness of the parts. However, if the growth is at all extensive, and if the glands are palpable, the prognosis is very bad, and we only operate because there is at present nothing better. There is always the chance of a brilliant result; the mouth is kept cleaner as a rule after operation, and the mortality is not a heavy one as far as operation goes. Moreover, patients recover very quickly from operation; they get up sometimes on the third day, and though mutilated are able to make themselves understood by those accustomed to them. I cannot understand why, in these progressive days, we do not get cases of malignant disease of the tongue earlier. The first thing that must cross the mind of any doctor who is asked to see an ulcer of the tongue must be "Is this cancer?"; and what does he do? In the first case he prescribes antisyphilitic remedies and his patient's chance goes. The only reasonable method is to paint the ulcer with cocaine and snip a minute bit off for examination. If it is clearly put to the patient how necessary it is, he will submit, and in any case the doctor has done his duty. A case now under my care was treated for many months with potassium iodide, and though I have operated upon him it was only as a last chance. In conclusion, I can only repeat that early diagnosis, wide excision, followed by removal of the glands in the neck, offers a reasonable hope of recovery in cases of cancer of the tongue; and where the operation is likely to be extensive, or where the posterior portion of the tongue is affected, preliminary laryngotomy is of the greatest value. I fear malignant disease of the upper jaw is still a very hopeless condition, and the operation of removal a severe one; but I still think these cases are worth operating on if seen in the earlier stages. It is wonderful how little deformity results, and what can be done by the dentist. If the cheek itself has to be sacrificed, a good deal can be done by plastic methods, and I have at present under my care a man whose cheek I am building up by means of a flap taken from his neck. When all is said and done, and we look back upon our cancer results, I fear that though we may relieve many we actually cure but few; and every surgeon looks forward to the time when a cure may be found for a disease which baffles medicine, and though many ingenious operations have been devised for its cure, the surgeon feels that in undertaking them, in the majority of instances, he is predestined to failure.

The Departmental Committee appointed to report upon the revision of the Poor Law Orders consists of Sir S. B. Provis, Sir J. S. Davy, Mr. W. T. Jerred, C.B., and Mr. Thomas Smith, with Mr. H. W. S. Francis as secretary. The draft Order described in *The Times* recently has been referred by the Committee to various bodies interested in the Poor Law, and has not yet been officially issued by the Local Government Board.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Sept. 14th, 1912.

RETIREMENT OF PROF. HEUBNER.

The announcement is made that Geh. Rat. Professor Heubner will vacate his post as Director of the Kinderheilklinik of the Charité, on the attainment of his seventieth year, which will be at the close of the present Semester. The announcement has been received with the general regret that might have been expected of all those to whom the name of Heubner is familiar as one of the most outstanding figures in the realm of medicine of the present day. We may perhaps be permitted to express the hope that in his retirement the distinguished Professor will be able to enjoy all the amenities of a vigorous and healthy old age.

MESOTHORIUM.

In the discussion that followed the reading of the paper on "The Action of Mesothorium," by Hr. Sticker, Hr. Pinkuss (amongst others) took part. He said he would only briefly relate his experiences with mesothorium in inoperable cancer. As already reported to the Society in March last, on the occasion of Hr. Bickel's address, he had observed good effects from irradiation of superficial returns of cancer. He then showed a woman who had several ulcerated nodules after a second operation for cancer of the breast, and where a marked cicatricial process had taken place under the influence of the mesothorium rays. Since then the cicatricial changes had become still more marked. This favourable influence, however, he had only observed in ulcerations that were superficial, and not in any cancerous nodules that lay at all beneath the skin; these, in spite of the raying, developed in the usual manner. As regarded *technique,* he would only say that he made use of very active capsules, and kept up the applications for an extended period. Now, as on the previous occasion, he could only say that mesothorium could only be looked on as an aid in the treatment of inoperable cancer, where surgical measures were no longer practicable, but that in such cases they were of equal value with X-rays and radium. In cases where he had used mesothorium in sub-vaginal recurrences of cancer he had observed a diminution in size for a time, or there was an arrest of growth for a longer or shorter period, but in the end he was not able to prevent a further advance of the disease, or the development of metastases. He must say that he almost envied Hr. Sticker his cases in which the development of metastases was prevented, his own cases had not been so fortunate.

Hr. F. Krause had sent for a patient that the meeting might see him, but he had already been given a dose of morphia, so could not come. He first saw the case last January. The man then had a small sarcoma on the shoulder, which could have been removed without any necessity for removing the arm, and the extremity would have been a quite useful one. The day was fixed for the man to come into hospital for the operation, when he underwent radium treatment instead, not only X-rays, but treatment by injection of radium, and not by an unknown or inexperienced practitioner, but by one of the first rank in Germany, so that the treatment would be carried out in the best manner possible.

He would have liked to show the man. In the morning he would unfortunately have to remove the whole shoulder girdle, the clavicle, the scapula, and the whole upper extremity; the tumour had grown so rapidly that it was now the size of a man's head. The gentleman had told the patient when the tumour softened that this was favourable, the softened mass was withdrawn by an aspirator. Every surgeon knew the condition, and knew that if such a tumour softened it was the more dangerous. A soft sarcoma was a hundred times more dangerous than a hard one, as it grew more quickly and metastases formed the more readily.

In view of such cases he must take the firmest stand on surgical grounds, and demand that no tumour that could be operated on should be submitted to either radium or X-rays or mesothorium. It was a step backwards—not to use a stronger expression. It was, however, an advantage to be in possession of such means—to be made use of in their proper place.

Hr. Isaac, who had at first worked along with Sticker, had continued in his own klinik. He had treated quite a number of skin cases with mesothorium, nævi, angiomata, lupus erythematosus, some cancroids, lupus vulgaris, also a case of lupus pernio. They had treated such and similar cases with radium previously, so that they were in a position of being able to compare the effects.

Whilst the application of even a few milligrammes of radium caused a deep destructive effect on the diseased tissues it was quite the opposite with mesothorium. Here a kind of inflammation was set up, which raised the diseased tissue up out of the skin, so that there was frequently a superficial exudation, and not infrequently the formation of vesicles. This inflammatory action was excessive when the dosage was large, so that the action had to be stopped unless one was ready to run the risk of doing a considerable amount of mischief. This tendency of mesothorium to act exudatively had the effect of causing cancroids to heal quickly, whilst in lupus erythematodes and nævus angiomatosus the effect was not so good.

Hr. Saalfeld said that he had applied carbonic acid snow to the part first to lessen sensibility, and he had found that the effects of both radium and mesothorium were increased by it.

Then for the protection of surrounding parts, for the sake of simplicity, he had used Belgian and Japanese coins which had a small hole through the centre.

Hr. Schönstadt wanted to know in how many of the cases the treatment failed, and in how many cases of carcinoma it had been successful? A large number of relapsing cases recovered without any special treatment, as any one knew who treated large numbers of cases. A few successes in treatment were not a proof of the value of the remedy.

AUSTRIA.

Vienna, Sept. 14th, 1912.

Amts Congress.

The Sanitary Congress this year was held in the large hall of the Cracow University, and attended by representatives of all the neighbouring provinces of Prussia and Russia. Czyzewicz, President of the Amtsaerzte of Galicia, welcomed the members to Cracow.

Szarski, in the name of the town, said that they had twelve medical inspectors for the schools of Cracow alone, and had recently added a modern infectious hospital.

Jurasz raised the subject of "Scleroma," giving its history, pathology and clinical aspect. He thought the principal infection spread from Eastern Galicia and South Eastern Russian provinces and gradually extended over Austria. The disease, after affecting one member of the family, slowly spread involving a whole town or district. It was necessary, under these circumstances, that the State should take more energetic measures to check its progress by systematic regulations and stringent notifications, as well as an exhaustive investigation of the pathogenesis of the disease, so that the spread of the plague could be checked in its early course. He then proposed a few regulations for the State, such as:—All the Crown lands of Austria giving statistics once a year of the places affected, with the number and severity of the disease; that central stations for proper treatment and isolation be instituted; that an international "Scleroma" conference of representatives from interested countries, such as Austria, Hungary, Russia, Prussia, Switzerland, Italy, Roumania and Spain should meet and discuss the subject of chronic and infectious acute forms of the disease and the different treatments adopted.

Haus next gave a history of his twenty years' work as Amtsaertz, in the large works of the neighbourhood and drew a contrast between his first engagement twenty years ago and the houses and homes of the workers of the present day. All was done by charity in his early experience, but now humanity prevailed and the social struggle for existence was much alleviated. The greatest difficulty he met with was with the capitalist in abating nuisances arising from effluvia and noxious gases.

Eisenberg complained that Austria was not doing her duty in the research for infectious diseases and bacteriology, both of which were of great importance to the medical officer of health; he thought the State should take an example from Prussia, which has provided institutes for examination and research under competent instructors.

Bory referred to the difficulty of differential diagnosis in typhus and typhoid, both in epidemics and sporadic conditions. In tracing the origin of the disease he was convinced that fleas played an active part in transmitting the germ.

Paul complained that the State did not give the medical officer proper assistance in notification to stamp out these diseases, as he thought it should provide subventions and stringent measures.

Winter proposed a thorough reform of the Public Health Act, of 1870, as it was quite out of harmony with the wants of the present day.

Besides the medical officers of health should have two years more of instruction in theoretical work at the expense of the State.

CANADA.

Montreal, Sept. 7th, 1912.

Cockerels and Cats in Montreal.

It has been frequently a cause for wonder to one who, like myself, has resided in New York, that cats have not been indicted as a nuisance and a menace to health by the progressive Board of Health of that city. These domestic members of the feline tribe swarm in New York, and from the extremely unhealthy appearance of some must be to some extent a menace to health. There are diseases which may be conveyed by cats, and furthermore, in New York at least, they are notorious scavengers. Garbage barrels, often filled with an indescribable mixture of unpleasant odds and ends of food and clothing, are the happy hunting ground of cats, who afterwards go into the respective houses to which they belong, and undoubtedly carry on their bodies and in their mouths filthy, if not infectious, material. City cats, as a rule, are not fitting denizens of a house nor appropriate companions of young children. However, it is not from this point of view that the inhabitants of Montreal have been objecting to their cats, but because they are ofttimes a nuisance in that they make unseemly noises in the night, preventing peaceable citizens from sleeping, and perhaps in some instances predisposing to insomnia. From this standpoint there are few city dwellers who will not sympathise with those of Montreal, for who among us has not been at one time or another kept from sleep by these unmelodious nocturnal disturbers? But in Montreal it is not even the cat who is the worst offender. It seems that many of the residents of the city on the St. Lawrence possess rural tastes, and although living in the heart of the Canadian metropolis, gratify their taste by keeping cockerels, hens, geese and turkeys. I was struck when reading the headlines of a Montreal daily paper the other day by the words "The rooster nuisance continues, and the Medical Officer of Health means to take a hand." Now, I have lived in different parts of America for many years, but I must confess I had to think twice before the identity of the rooster with the domestic cockerel impressed itself on my understanding. When I did appreciate the point, I also fully appreciated the good sense of those who objected to this form of music in the early hours of the morning, and also the readiness of the Medical Officer of Health to allow that the continuous crowing of a strong-lunged cockerel in the hours of dawn should constitute a nuisance. Moreover, it is asserted by a sufferer who lives in a residential street in the centre of Montreal that a neighbour in a flat under him not only keeps hens and a vociferous rooster, but he has turkeys and geese, and is now talking of getting a parrot. As Dr. Laberge, the Medical Officer of Health, pertinently admitted, that while a rooster was all right enough in a farmyard, it was a different matter when he was transferred to a residential street where the back yards were the size of billiard tables, and where every cock crow resounded like a trumpet through the near-by row of flats. Although Dr. Laberge is thus sympathetic and willing to invoke the strong arm of the law to abate the nuisance, he is not yet certain whether the owners of cackling hens and crowing roosters in a residential street can be compelled to get rid of them—that is, so long as they are kept in a sanitary condition. If a test case be brought it is to be hoped, for the sake of humanity at large, that the decision may be against the owners of the roosters.

Montreal's Birth and Death Rates.

Montreal has for long been distinguished among the cities of the civilised world for its extremely high birth-rate, but it has been likewise notorious for its appalling death-rate. Last year the birth-rate of Montreal was 37.49 per 1,000, and the death-rate 21.19, which represents a gain in births of 1 per cent., and a decrease in deaths of one and a fifth per cent., as compared with the record of the year preceding. Dr. Laberge, City Officer of Health, recently announced these figures, which will be included in his annual report for 1911, shortly to be issued. The city's population in 1910 was 455,800, and in the present year about 470,000. Dr. Laberge is of the opinion that the decennial census should be replaced by a census every five years, and thinks it would be a good idea if Montreal could make some arrangement with the Dominion Government to that effect. Montreal has had an unsavory reputation for unhealthiness, but is now rapidly improving from the health standpoint. In 1872 the death-rate was 37.36 per 1,000. In 1878 the rate was brought down to 30.51, and since that time, with the exception of the years when small-pox was raging, has been going down steadily. There is, however, as is acknowledged by all, room for great improvements in the sanitary conditions of Montreal. The sewage arrangements and water supply are not so good as they might be, although work in these directions is now going on. Montreal is badly paved and there is much overcrowding, more overcrowding by far than is consistent with good health.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

James Murray's Royal Asylum, Perth.—In his annual report, Dr. Urquhart, Physician Superintendent gives the average admission rate since 1865 as 53.13; for the year that has just passed there have been only 27 admissions. Fifteen of these were regarded as curable, and of them eight have recovered or are convalescent. In Dr. Urquhart's opinion the alcoholic patients received are really mentally defective—the insane constitution precedes the drunkenness and causes it. The general recovery rate of the asylum during the years 1865-1911 is 34.33. Last year it was 22.2, as compared with 49.1 in the preceding year. In his general remarks on the Institution's progress, Dr. Urquhart expresses some regret that more has not resulted in the way of treatment from recent researches, and he speaks of the disasters which may befall the Royal Asylums of Scotland through promised legislation. The district asylums were lately provided with pensions, thereby putting them on an equality with similar institutions in Scotland and England. No sooner has this become law than an Amending Act is threatened, which reduces these hospitals for mental diseases to the level of factories in respect of hours of work. The Royal Asylums require no such enactment, nor, indeed, do the District Asylums. However suitable that may be for the vast asylums of London and Lancashire it is unnecessary and adverse to the interests of patients and staff in every asylum in Scotland.

Roxburgh, Berwick, and Selkirk District Asylum.—The report of this asylum for the year ending May 15th, 1912, has now been issued. A considerable part of Dr. Carlyle Johnson's report is concerned with the effects of recent legislation. Although the Asylum Officers' Superannuation Act has only been in force for two years, two Amending Bills are already before the Commons. The Act has been difficult to interpret on account of the obscurity of its terms, and it has entailed hardship on those it was intended to benefit. The "Asylums Officers' (Employment, Pensions and Superannuation) Bill," presented by Viscount Woolmer in February, 1911, is of a hybrid character. While embodying several commendable amendments, it introduces the contentious proposition of fixing the hours of employment of all asylum attendants. While the labours of a Select Committee have improved it, it still involves the new and questionable principle—viz., that the Legislature should fix the hours of work of employees of local authorities. In Scotland, whatever be the case with regard to English asylums, there is no call for this; the nurses and attendants are satisfied with their lot, and realise the efforts made for their comfort; superintendents, on the other hand, appreciate the loyal services of their nurses and have their interests keenly at heart. Hours of duty have been shortened and leave increased, but legislative restrictions, which would lead attendants to regard their legal right as of the first importance and their duties to patients as of secondary importance, are much to be deprecated. If the schedule of hours, recommended by the Select Committee, is imposed, the result will be that in some of the Scottish asylums the hours will be longer than they are at present. A second Bill, the "Asylum Officers Superannuation Bill," has been introduced by the promoters of the principal Act. In this an attempt is made to remedy the anomalies of the Act, without introducing the contentious features of Lord Woolmer's Bill. It is now proposed that every permanent servant shall be pensionable, and that the definition of "first class" established officers and servants shall be considerably extended. The measure will effect a final settlement of the disputes which were aroused by the original Act, and it is hoped that it may pass into law.

The Lunacy (Scotland) Bill contains one clause which appears to be hurtful to a particular class of the community. This is Clause 3, which provides for the reception of private patients in district asylums. For long it has been the practice to receive into the Scottish district asylums, provided there was accommodation over and above what was required by the pauper patients, private patients at low rates of board. Thus a class of patient was catered for who could afford to contribute towards his maintenance and thus escape the stigma of pauperism, but who could not afford to reside in a Royal Asylum. Under the ægis of the commissioners and superintendents such private patients have enjoyed certain privileges of board and accommodation, as compared with the patients borne upon the rates. The Act proposes to limit the charge to be made for such patients to a sum not exceeding £10 above the amount paid for pauper patients, and, in addition, it is provided that such private patients "shall have the same accommodation, food, and attendance in all respects as the pauper patients." As Dr. Johnstone says, "It is difficult to understand how such a harsh, retrograde, and inconsiderate proposal can have been allowed to find its way into print." It relegates the poor professional man, the village shopkeeper, the small farmer, the decayed gentlewoman, afflicted with mental disease to the status of pauperdom, and, instead of lightening the restrictions which a generous administration has established it enhances them and condemns the patients to pay a prohibitive rate for the privilege of being treated in all respects like a pauper.

Honour to Sir William Turner.—His Majesty the

Emperor of Germany has conferred on Principal Sir William Turner, K.C.B., the Insignia of Knight of the Royal Prussian Order, *Pour le Mèrite*, in the department of Science, in recognition of his eminence as an anatomist. The number of Knights of the Order is strictly limited, and the death of Lord Lister in the spring of the year having caused a vacancy Sir William Turner has been selected to fill it.

BELFAST.

Registration of Midwives.—At the weekly meeting of the Public Health Committee of the Corporation held on the 12th inst., a deputation from the British Medical Association (Belfast Division) attended in reference to the enforcement of the Local Act, 1911, as concerned the provisions for the registration of midwives practising in the city. Sir John Byers and Dr. H. J. Ritchie, addressed the Committee at length, on behalf of the deputation, and explained that the matter was one of great importance not only to the public, but also to the medical profession. They urged that in the framing of rules and regulations under the Act the members of the profession should be given an opportunity of stating their views, and also that they should have representation cn the committee appointed to deal with the question.

Sanatorium Treatment and the Insurance Act.—At a meeting of the Londonderry Public Health Committee held last week, a report was received from a sub-committee, which had been considering the question of Sanatorium Treatment. They reported that they had been unable to come to any agreement for joint action with the County Council, and they recommended that a site be selected on Foyle Hill and plans prepared for the erection of a temporary building to be used as a sanatorium and tuberculosis dispensary, and also that a tuberculosis medical officer be at once advertised for at a salary of £350 per annum, to devote his entire time to the duties of the office. Councillor Dr. M'Caull said that he would like to see the duties of the medical officer defined before any appointment was made. It would be impossible for them to get a man of experience, and who had proper qualifications, and who would be of advantage to the city, and consulted by other medical men, at a salary of £350 a year. If the medical officer were a junior doctor, without experience, they might not expect the senior members of the profession in the city to consult him. Speaking for himself, he would certainly not do so, and he believed his colleagues would take the same course. If they, on the other hand, wished to procure the services of a thoroughly competent senior qualified man they would not get such an official for the salary suggested, so that if they advertised the sum mentioned in the report, the result would only be harmful, instead of helpful. The Mayor said that Councillor Dr. M'Caull's remarks were very wise and thoughtful, and, after some discussion, it was decided to postpone the matter for further information.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE TUBERCULOSIS CAMPAIGN IN IRELAND.

To the Editor of The Medical Press and Circular.

Sir,—The long, well-written articles of Dr. Agnew, of Lurgan, about the White Scourge should, I think, cause medical men deep thought. Unless the money be usefully spent it might as well not be given. I will take his suggestions :—

A Sanatorium for each Province.—The general consensus of opinion is that a sanatorium is of great use in educating patients how to live and how to avoid infecting others and is of benefit to poor people, who, while resident, get good food and proper hygienic treatment, but that the curative effects are greatly overrated by the public, and that thus false hopes are given to patients and friends. Owing to distances, if there is any good to be derived one for each province is insufficient.

A Tuberculosis Dispensary for each County.—What advantage could consumptives derive from one dispensary, say in Donegal? How could a patient, living on the confines of the county at Bundoran, Ardara, Tory Island or Gwedore on one side, or Lifford St. Johnston or Derry on the other, or in the central parts, which I need not name, attend at frequent intervals any dispensary, no matter in what part situated, and how much infection would be spread in travelling? This brings us to the only practical suggestion—namely, domiciliary visits. Then the question comes, who is to undertake the domiciliary treatment, and there is only one answer, the dispensary doctors, and they are quite capable, their only handicap being the homes of the poor, where it is impossible to isolate or properly feed a case. I have recollections of having had to treat cases in badly built, damp, dark cottages of one or two rooms, where a numerous family had to find sleeping accommodation somehow, and unless legislation can compel the patient to go away to a sanatorium or other isolation place for the rest of his days, isolation is impossible. I cannot see what good a chief tuberculosis officer could do, but I can see a great evil that he will do. He will in the eyes of the people depreciate and lower the status of the medical man in attendance, and they will get to think that their doctor has not the ability to treat them and that the tuberculosis officer has special knowledge and can work miracles. Clinical auscultation, as Szendeffy states, is yet the chief means of diagnosis, and surely the doctors who are seeing such cases daily in their work are the most reliable for spotting the disease and to undertake its extermination, but to do so two things at least are required—small isolation homes in every one or two combined dispensary districts, and legal power to send the sufferer to the home and compel him to remain there, but I fear this is a counsel of perfection that is impossible. Instead of appointing a chief tuberculosis officer, a few men of leading might be nominated as consultants for each district as was done in London during small-pox epidemics, whose services could be had when the attending doctor wished for a second opinion. To exterminate the disease the treatment of cases is, I take it, of less consequence to the country than its prevention. Your report from Belfast of the number of tuberculous cattle found in the slaughter-houses points, I think, to a use that a good deal of the money might be put to, as if it were possible to free the milk and beef from tubercle a considerable source of infection would be abolished. Prof. Whitla, in an illuminating address some four or five years ago, gave some instances of infection by milk from a prize-taking cow. I have great hopes that the improved cottages, erected under the Labourers' Housing Act, will do much to stamp out the disease, but, of course, they are comparatively few, and unfortunately the majority of cottages are far from ideal. Exhibitions, caravans, lectures and literature will do much, but isolation, good housing and proper feeding are required, and my only object in writing this letter is to beg of those who have the country's good at heart to spend the money usefully and practically and not to fritter it away on highly-paid officers, whether medical or otherwise.

I am, Sir, yours truly,
James Hamilton, M.D., M.Ch.

Chelsea, September 15th, 1912.

EIGHTIETH BIRTHDAY OF LORD ROBERTS.

To the Editor of The Medical Press and Circular.

Sir,—On the last day of this month Field Marshal Earl Roberts will attain the age of 80 years, and it is proposed to make a presentation to him on that occasion. Subscriptions are being collected by the branches of the National Service League throughout the Kingdom, and Lord Roberts has intimated that all sums not ear-marked to provide a personal gift for himself will be utilised by him in furthering the adoption of universal military training by this country.

It is probable that many persons, who are not members of the National Service League, may wish to join in paying a tribute of respect to our veteran Field Marshal, and we desire to inform them that the smallest sums will be gratefully received and acknowledged by the secretaries of the Dublin branch of the National Service League.

We are, Sir, yours truly,
R. K. Crawford,
J. B. Story,
Hon. Secs. National Service League, Dublin.
6 Merrion Square, Dublin,
September 9th, 1912.

[As a journal which has, since its birth more than 73 years ago, been closely identified with Irish life, we venture to urge our readers to use their influence in supporting the proposed memorial to a great fellow-countryman.—Ed. M. P. and C.]

TUBERCULOSIS: A SANITARY INSPECTOR'S VIEWS.

To the Editor of The Medical Press and Circular.

Sir,—Your editorial note on the *Westminster Review* articles concerning tuberculous cows leads me to write to you. My card enclosed will tell you that I am a sanitary inspector in a semi-rural district amidst manufacturing towns. I have held my position for upwards of twenty years. I have kept my eyes and ears open. I have been a constant enough reader of medical papers, including yours, and through friends I get a sight of leading papers, even *The Times*, now and again. My slight scientific knowledge and my experience have taught me many things. Among other things I have learnt that a sanitary inspector dare not, by advice or action, go beyond the wishes of the authority whose servant he is. If he does, he will probably be got rid of on the first opportunity, or his miserable stipend will be docked, or he will risk the loss of a retiring pension. Men of my length of service and age, with no possible other career open, are obliged to keep our mouths shut whilst trying to do our duty so far as we can.

I can see clearly that measures for the prevention are of far greater importance than the treatment of tuberculosis; but this fact does not seem to have been clear to Mr. Lloyd George and his advisers in framing the Insurance Act. And it is clearly much easier to prevent than to cure the disease. Great part of the money put aside for sanatoria, and suc likeh things, ought to have gone towards prevention. In prevention the housing problem comes first. The people who live in slums and in slum dwellings, the latter as common in rural as in urban districts, supply the great bulk of victims to tuberculosis. This evil might have been very much diminished under existing laws; but, as I can testify, the laws have been largely in the hands of the very persons concerned in breaking them. These men often seek seats on the local authority with the intention of protecting themselves and their friends from interference. This is the fault everywhere of the better classes. Men of education and position in sufficient numbers cannot be found to take part in local government. If laws were properly administered, it would be impossible to find Local Government Board reports such as are now quite common. One of these is quoted in a leader in *The Times* last week. I read that in a certain rural district pigs are kept in the same sheds as milch cows, and that in a patched-up shed, containing ten cows, unventilated save through doors, in which milking was being carried on, the air was almost unbearably hot, as well as offensive. "The milker's face and arms were steaming with sweat, drops of which could be seen steadily falling into his milking pail as he worked." As regards foldyards, the general condition is reported to be bad. Manure is accumulated in vast quantities close to the openings of sheds. "In two instances I saw cows plunging through this in order to enter the sheds to be milked, their udders trailing in the filth." I can confirm the writer's statement that in this description there is nothing exceptional. There are, of course, dairies in which cleanliness is found, and in which care is taken of the milk; but even in these, as a rule, there is no exclusion of cows affected with tubercle, so long as it does not occur in their udders, and we know, from the report of the Royal Commission, that its presence is dangerous to the consumer. As long as the conditions described exist, attempts to cure tuberculosis will be condemned to failure.

The housing problem, enforcement of laws for the prevention of insanitary dwellings, the stamping out of tuberculosis in milch cows, and prevention of the sale of tuberculous flesh of every sort seem beyond doubt the first things to call for attention, and local authorities, when necessary, should be compelled to do their duty.

I am, Sir, yours truly,
"Sanitary Inspector."

THE POSITION OF DENTISTRY.

To the Editor of The Medical Press and Circular.

Sir,—The Dental Profession is under a great debt of gratitude to the Medical Press. It has never forgotten the claims of Dentistry as a legally recognised medical speciality. It has never omitted to insist upon the right of Dentistry to be duly considered in all projects of medical law reform. In your last issue you print an excellent letter on the subject by "An Occasional Correspondent." With every word he writes I agree. He has, however, not stated the fact that the failure of dental legislation has, so far as it could, injured the speciality and the public relatively and comparatively to a far greater extent than the failure of the Medical Acts. There are now a greater number of unqualified than of qualified dentists. The unqualified men are either surgically uneducated mechanics, or ignorant quacks of a more or less fraudulent type. The harm they do falls mostly upon the poorer classes. The wealthier people, advised often by their doctors, select qualified men. The victims of the quacks are to be found in numbers among hospital patients; and now that so much attention is being given to "septic mouth," they are constantly being sent to the dental department. It is amazing, for example, to see the number of wretched women whose health is being injured by dental disease. I have just seen such a case. The upper front teeth being lost, and appearance being of importance in her calling, the woman applied to an advertising firm. Beneath a large denture was found the more or less completely necrosed roots of a dozen teeth, each the centre of a chronic foul abscess. The amount of pus being swallowed daily in such a case is enough to account for serious constitutional disease. Examples by the score of similar cases could be cited. It is quite certain that no qualified dentist, not being a completely heartless rogue, could deal with cases like these in such a fashion; but this is the rule with the unqualified practitioner, who is either merely ignorant or callously dishonest. The cases in which artificial teeth can be properly inserted without preliminary treatment of remaining decayed teeth are not one in a thousand. The quack makes his money by supplying artificial substitutes without surgical consideration of any kind. The situation of men entering practice is very hard. I have a letter before me from a former pupil. He has full medical besides the dental qualification. He made himself a thorough mechanic first of all, and his education filled seven years. He began practice in a semi-rural district having a small town nucleus. He has to compete with two resident local unqualified men, and with three quack firms who visit the town periodically. All these people advertise "dental surgery," "dentistry," and so on, and make the usual fine promises. They get the greater part of the country people who need artificial teeth, and gain big fees from many. The qualified man cannot advertise nor puff himself. To the detriment of the public he is thus robbed of his legitimate practice; and although personally and professionally on a level with his medical colleagues in the district, he is looked upon socially more or less askance, as "merely a dentist" by the people of the place. My friend loves his profession, of which he is a master, but says he begins to regret having taken it up.

I am, Sir, yours truly,
"A Hospital Dentist."
London, September 6th.

OBITUARY.

JOHN E. RANKING, M.D.Oxon.

We regret to announce that on the 11th instant, through his motor skidding down hill, Dr. Ranking, of Tunbridge Wells, met with a fatal accident at Bexhill. The driver of the car, in endeavouring to avoid a woman who was crossing the road, applied his brakes rather sharply, but the tyres failed to hold on the tarred road, the result being that the car ran into the bank and overturned. The driver escaped injury, but Dr. Ranking was thrown out and sustained severe injuries. He died two hours later. Mrs. Ranking was also badly injured, but her daughter, who was also in the car, only sustained a few cuts.

Dr. Ranking, who was somewhat advanced in years, graduated as M.B. of Oxford in 1876, and M.R.C.S. and L.S.A. in 1874. He was educated medically at St. Bartholomew's Hospital, and was one of the best-known practitioners in the county.

DR. R. E. THOMPSON, OF LONDON.

We regret to record the death of Dr. Reginald Edward Thompson, which took place on September 10th, in his 79th year. The deceased who was the son of Mr. Serjeant Thompson, was educated at Brighton College, Trinity College, Cambridge, and St. George's Hospital. He qualified M.B.Cantab., in 1860, and in the following year he went on a shooting expedition to the far Canadian North-West. A few years later he crossed the Rocky Mountains with the late Dr. W. B. Cheadle. Dr. Thompson subsequently returned to his *alma mater*, being shortly afterwards appointed medical registrar at St. George's Hospital. He soon had the opportunity of becoming acquainted first-hand with typhus fever, an epidemic of which occurred at that time among the inhabitants of the tenements adjoining Sloane Street. A personal sufferer from the disease, he contributed a valuable paper on typhus fever to the first volume (1866) of the St. George's Hospital Reports. In 1869 he was appointed Assistant Physician to the Hospital for Consumption, Brompton, becoming Physician in 1880, a post which he held till 1894, being afterwards appointed Consulting Physician. He was also Physician to the Seamen's Hospital, Greenwich. In 1880 Dr. Thompson was secretary of the Royal Medical and Chirurgical Society, becoming Vice-President three years later. He took the M.D.Cantab., in 1863, and was elected F.R.C.P.Lond., in 1868. He had taken an active part in the life insurance world, and in his earlier days he excelled in music and painting.

DR. H. L. A. BARRY, OF BIRMINGHAM.

An inquest was held on Wednesday last by the Central Warwickshire Coroner, concerning the sudden death, at the early age of 32, which took place at his residence, Aston Manor, near Birmingham, on the previous Monday. From the evidence given by the widow and by the servant, who found him dead in his chair, it appeared that deceased suffered severely from rheumatism, which affected his heart, and sleeplessness, for which he frequently took sedatives. On Monday he complained of want of sleep, and his widow advised him to take another dose of sedative, but he refused.

The servant said that she found the doctor sitting in a chair. She touched his hand and found it was cold, and thought at first he had fainted.

Dr. Hill Norris, who was called in, said that Dr. Barry was dead when he arrived. A *post-mortem* examination showed no trace of poison. Death was due to heart failure, induced by chronic alcoholism and accelerated by the taking of the sedative.

The jury found that death was due to heart failure, and expressed sympathy with the widow.

OPERATING THEATRES.

WEST LONDON HOSPITAL.

Ruptured Liver.—Mr. Aslett Baldwin operated on a girl, æt. 11, a four-wheeled market cart having passed over the upper part of her abdomen. On admission shock was present to a marked degree, the pulse was rapid and feeble; there were slight abrasions on the chest, but no other external signs of violence; the chest moved well on both sides. The inner ends of probably the third and fourth ribs were fractured. The lungs were normal, excepting for a few moist sounds. The abdomen was not distended and moved well and there was no marked tenderness and no rigidity; the liver dulness was normal, and there was no dulness in the loins.

On the next day the patient was in a good deal of pain, and there was tenderness in the hepatic region. The abdomen was distended and resistant, though not absolutely rigid. There was a tympanitic note on percussion with impairment in the flanks. The breathing was short and jerky, and the girl was very pale, with a pulse of 160.

Mr. Baldwin decided to operate at once. Ether having been administered by Mr. Rickard Lloyd, an incision about four inches long was made in the middle line. Free blood was found in the abdomen, and it was discovered that the liver was ruptured on the right side, the tear being situated on its upper surface. A white gauze roll was stuffed between the tear and the diaphragm and the abdomen closed, excepting where the gauze protruded at the upper end of the incision. The other viscera appeared to be normal. Saline solution was transfused subcutaneously to repair the loss of blood.

Mr. Baldwin said that this was a very instructive case of abdominal injury because it showed what a serious lesion may be present, but when the patient is first seen there may be no indication for immediate operation; this had been the opinion of one of Mr. Baldwin's colleagues, who had seen the child on the day before, soon after admission. When Mr. Baldwin saw her she was much worse, in great pain, with tenderness in the hepatic region; the abdomen was distended and resistant, though not really rigid. In front there was a tympanitic note on percussion, but some suspicion of dulness in the flanks. The patient was very pale and the breathing was short and jerky. As far as could be counted the pulse was about 160. On opening the abdomen and getting the hand inside, he pointed out that he could feel an extensive star-shaped rupture on the upper surface of the liver on the right side. As it was quite impossible to suture this, and the child's position was one of extreme gravity, all he could do was to stop the hæmorrhage with tight plugging with sterile gauze. He did not attempt to clear out any of the blood in the abdomen as he was afraid the child might die at any moment. The position of the rupture was high up and underneath the ribs, and the gravity of the patient's condition rendered suturing out of the question. He remarked that hasty examination of the spleen and other viscera within reach showed that they were apparently uninjured. The abdomen was closed with through and through sutures, he pointed out, to save time on account of the urgency of the case.

The patient was in a precarious condition the day after the operation, there was slight bleeding which, however, soon stopped. On the next day there was a slight improvement, no bleeding, but a profuse discharge of bile, which continued for the next three days. On the sixth day the gauze plug was removed About eight weeks afterwards the patient was convalescent, there being then a ropy yellow discharge from the wound. Several pieces of necrosed liver came away during the next three weeks, at the end of which the girl was sent to a convalescent home, on her return from which in three weeks she was found to be in good health; the wound was quite healed and there was no ventral hernia.

LITERARY NOTES.

We have received from the Scientific Press a booklet, entitled "Medical Names for Private Patients, 1912; a Classified Directory with Lists of Medical Consultants," published at the price of 6d. net. We have failed to discover on what principle any of the lists in the book have been compiled. The omissions from the lists of "consultants" are as noteworthy as the insertions, but even had the publication any claim to completeness, it could hardly commend itself to the taste of the medical profession.

* * *

Messrs. D. Appleton and Co. announce for publication this week a new eighth edition of "The Principles and Practice of Medicine," by Sir William Osler, Bart., M.D., F.R.S., entirely re-arranged and re-written. All the sections have been revised in the light of recent advances in medicine, and many new sections have been added. Sir William Osler's book is so well-known that students and practitioners will be glad to learn of the appearance of this new eighth edition.

* * *

Messrs. J. and A. Churchill announce the following new works and new editions:—"Mother and Baby," by Selina F. Fox, M.D., B.S., Senior Physician of the Bermondsey Medical Mission for Women and Children. "A Treatise on Tumours," by Arthur E. Hertzler, M.D., Ph.D., Assoc. Professor of Surgery in the University of Kansas. "Meat Hygiene," with special consideration of *ante-mortem* and *post-mortem* inspection of food-producing animals, 2nd edition, by Richard Edelmann, Ph.D., of Dresden. Translated by John R. Mohler, A.M., V.M.D., and Adolph Eichhorn, D.V.S.

* * *

A revised and enlarged second edition of the popular series of articles, entitled "Round the Fountain," has been recently issued. As many of our readers know, this booklet consists of prose and verse collected for the most part from the *St. Bartholomew's Hospital Journal*. It will be of interest to any-one connected with the medical profession, and is sold by the Editors for the benefit of the Nurses' Home Rebuilding Fund, at the *Journal* Office, St. Bartholomew's Hospital. It certainly should, as a matter of course, be in the hands of every former "Barts." student.

* * *

A most useful book of reference is Low's "Handbook of the Charities of London." It is not given to many shilling volumes to attain the highly reputable age of 77 years, for this, the oldest guide of the sort in existence, first saw the light of day in 1834. The information given as to each institution is comprehensive, as it states the object, date of foundation, office, income, expenditure, invested funds, bankers, treasurers and secretaries of over 1,200 charities. The unceasing volume of philanthropy connoted in this record bears a remarkable testimony to the philanthropy of our fellow-countrymen. This useful little work is now in the hands of the well-known firm, Messrs. Charles H. Sell, of Leighton House, Fleet Street, London, E.C.

* * *

The following new editions are announced:—By Messrs. Longmans: Vols. I., II., III., in the eleventh edition of Quain's "Anatomy," and Vols. I., II. of Cheyne and Burghard's "Surgical Treatment." By Mr. Lewis: Carter's "Elements of Practical Medicine," tenth edition. By Messrs. Macmillan: The second edition of "A New System of Medicine," by many writers, and a "Text-Book of Pathology" by Dr. Geo. Adami and Dr. J. McCrae. By Messrs. Lippincott: The tenth edition of White and Martin's "Genito-Urinary Surgery and Venereal Diseases." By Messrs. Appletons: The eighth edition of Osler's "Practice of Medicine," and by Messrs. Smith, Elder and Co., a new edition of Marshall and Hurst's "Junior Course of Practical Zoology."

* * *

The study of diseases of the Tropics has become such an important feature in medical education that we are now promised a new fortnightly journal, entitled the "Tropical Diseases Bulletin," under the general editorship of the Director of the Tropical Diseases Bureau, Imperial Institute, London, A. G. Bagshawe, M.B., D.P.H., Cantab., F.L.S. The first number will appear in November, and will be published by Messrs. Bailliere, Tindall and Cox, at an annual subscription of one guinea. The Tropical and Sub-Tropical Diseases of Man will be grouped in sections, which will be in charge of the following sectional editors:—Fleet-Surgeon P. W. Bassett-Smith, C.B., Lt.-Col. C. Birt, R.A.M.C., Dr. W. Carnegie Brown, Professor George Dean, Dr. H. B. Fantham, Dr. Edward Hindle, Dr. R. T. Leiper, Dr. David Thomson, Dr. C. M. Wenyon. Groups will be taken also by the Director and Assistant Director, and each number will consist of about fifty pages.

NEW PREPARATIONS.

"HYDROQUININE HYDROCHLORIC" (ZIMMER).

A new quinine preparation has been placed on the market by Messrs. Zimmer and Co., of Frankfurt. A specimen has been sent us, and from a careful examination we are pleased to say that this new compound would appear to have a good future before it. The formula is dihydroquinine hydrochloric, which differs from quinine in that it contains two hydrogen atoms more than the latter. Its composition is as follows:— $C_{20} H_{26} N_2 O_2 . HCl + H_2 O$. Hydroquinine occurs in small quantities in the cinchona barks and is very similar to quinine as regards its properties so that it can only with great difficulty be separated from quinine. We have now succeeded in preparing this alkaloid synthetically from quinine, and there is nothing now to impede its therapeutical employment. The difference between quinine and hydroquinine in the treatment of trypanosomes infection is said to be striking. Of eleven animals treated with quinine nine succumbed to the infection, whilst there was only one death among the same number of animals treated with hydroquinine. These and analogous experiments show that, all things being equal, hydroquinine is superior to quinine in the protection against the infection. Doses of hydroquinine hydrochloric, on the other hand, injected 1—3 times on consecutive days, result in almost all cases in the complete disappearance of trypanosomes from the circulatory system.

Free trial quantities of hydroquinine hydrochloric as such, or in solution (ampls of 7½ grains, ready for injections) are at the disposal of medical men.

MEDICAL NEWS IN BRIEF.

Death under an Anæsthetic.

The death under an anæsthetic of Henry Adolf Nedden, aged 14, was the subject of a recent inquest at South Shields by Coroner Graham.

John Petersen, said the deceased, his nephew, complained of pain in the abdomen on Saturday, August 31st, and on Dr. Crichton's advice he was removed to the Wellington Terrace Nursing Home for an operation, which was performed on Saturday last.

Dr. Marks stated that the operation had been in progress four or five minutes when the boy's respiration suddenly ceased. Death was due to heart failure. He examined the boy before operation, and considered that he was in a fit state to undergo it. The operation was necessary. He had administered chloroform in hundreds of cases, he said, in reply to the Coroner, and this was his first fatal case.

The jury found that death was due to heart failure while the patient was under the influence of chloroform properly administered for the purpose of a necessary surgical operation.

Death under Anæsthetic—Strange Hoxton Case.

At the City Coroner's Court on the 11th inst., Dr. Waldo inquired into the death of Ruth Gertrude Gibbs, æt. 24, which took place at St. Bartholomew's Hospital while undergoing an operation.

Deceased was received into the Hoxton Infirmary on April 10th last suffering from wounds to the throat and right hand. After treatment she was able to leave the infirmary on May 14th, and went to reside at a friend's house. She returned to work as a boxmaker, but not having regained the full use of her right arm she, about six weeks ago, consulted a doctor at St. Bartholomew's Hospital, and was advised to undergo an operation. She was admitted on August 28th.

Deceased's husband, William John Gibbs, a packer and ex-soldier, was arrested in connection with the injuries received by the woman in April, and was charged with attempted murder. He was tried at the Old Bailey, and was convicted of the lesser charge of feloniously wounding, being sentenced to four years' penal servitude. The husband, who is undergoing his sentence at Portland Prison, attended the inquest under escort, and was permitted to sit beside his father at the solicitors' table.

Police-constable John Fever stated that he found the deceased lying on the ground and Gibbs bending over her. The woman was bleeding from the neck. He asked Gibbs what he knew about it, and he said, "I done it, governor. It is all her own fault. She has left me. I promised it to her, and now she has got it." Gibbs then produced a razor and said, "I have done it with this."

The House-Surgeon of the Hoxton Infirmary stated that the deceased's wounds healed and she was discharged in good health. He did not find any nerve injured, but the nerve running through the muscles must have been severed, although he did not detect it.

Dr. Grange, House Surgeon of St. Bartholomew's Hospital, stated that it was found that there was an injury to a nerve, and it was suggested there should be an operation for joining together the ends of the nerve. Deceased collapsed while the operation was being performed. She had said that she had had rheumatic fever three years ago, and there was disease of a valve of the heart, which might have been the result of rheumatism.

Dr. Spilsbury, pathologist at St. Mary's Hospital, said the nerve of the right side of the neck was severed, the effect of which was to paralyse and produce a wasting of the muscles supplied by the nerve. The immediate cause of death was heart failure due to disease of the heart muscle. He believed if the anæsthetic had not been given death would not have occurred, but the operation was a long and painful one, and the anæsthetic was necessary.

In answer to a juryman, Dr. Spilsbury said if the deceased had not had the wound in the throat the operation would not have been necessary.

Dr. Gill, who administered the anæsthetic stated that he was informed that there was disease of the heart, and considering that the operation was not one for a junior to undertake, he undertook to administer the anæsthetic himself. He chose chloroform, as the operation was one of delicacy. A normal quantity was used, and the usual system was followed. He considered that death was natural, and that the chloroform did not hasten death. The woman was liable to die at any moment, especially in stages of emotion. Death, in his opinion, was due to fatty degeneration of the heart.

In regard to the proportion of deaths under anæsthetics, Dr. Gill said that it worked out at about one in 9,000 or 10,000 for St. Bartholomew's Hospital.

Gibbs asked witness if he thought the operation was justified when it was known that the deceased's heart was weak, and Dr. Gill pointed out that such condition was very common, and every precaution was taken.

Dr. Grange, recalled, said that he was of opinion that death was due to heart failure from an exciting cause, and that the exciting cause was the anæsthetic. He, therefore, agreed with Dr. Spilsbury, and considered that the death was unnatural.

The coroner said the case was a very peculiar one. He had never in his experience known a case like it. It was for the jury to say whether the man Gibbs was to blame criminally for the woman's death. The case was a very difficult one. The operation was not a means for the preservation of life following the injury. If the woman had not had the operation there was a possibility that she might have lived. If the jury decided to set aside the question of murder, and considered that death was unnatural, they might bring in a verdict of misadventure.

The jury retired to consider their verdict, which they gave as "Death by misadventure."

St. Mary's Hospital Medical School, Paddington.

The opening of the Winter Session will take place on Tuesday, October 1st, at 3.30 p.m., when the prizes and awards for 1911-12 will be presented by the Lord Mayor of London.

The Annual Dinner of Past and Present Students will be held on Wednesday, October 2nd, at the Grand Hall, Princes' Restaurant, at 7 p.m. The chair will be occupied by Dr. W. J. Gow, Senior Obstetric Surgeon to the Hospital.

The Royal Life Saving Society.

During the first half-year of 1911 the Royal Life Saving Society granted 3,799 awards, and during the first half-year of 1912 these figures were increased to 5,506. For the life-saving competitions a large number of entries have been received, 108 teams, representing nearly 500 individual competitors, having being registered for various tests. The classes of instruction in the Navy and the Army at home and on foreign stations show an increase.

Closing of an Asylum.

It is reported that the managers of the Poplar and Stepney Sick Asylum have decided to give notice to terminate the lease of their Blackwall Branch Asylum, and the place will be closed. The branch asylum was originally opened for the reception of children, but the Metropolitan Asylums Board having since taken charge of children there is no longer need for the place, which has been used for adult patients. It is stated that the Stepney Guardians will save £1,000 a year by the closing of the Blackwall Asylum and that the Poplar Guardians will save an amount equal to a penny rate.

New Hospital for Women in London.

Beside the hospitals for women to which we referred in our last issue, we understand it is now proposed to erect a new hospital for women in South London on a site of three acres, which has already been obtained with a frontage on Clapham Common. A committee has already been elected, and the building will contain an in-patient department with general and private wards, the latter being intended for women of small means who cannot afford to go to a nursing home. Women doctors will be on the honorary staff, and there will also be a well-staffed out-patient department with a woman inquiry officer.

The scheme is being supported by Mrs. Garrett Anderson, M.D., Lady Robert Cecil, Lady Cowdray, Sir Bryan Donkin, Sir James Goodhart, Lady Roberts, Mrs. Scharlieb, M.D., the Bishop of Southwark, and the Bishop of Winchester.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Mala Fides.—The book is out of print.

Matron.—It has been stated that a newly-laid egg, which is sterile can be kept fresh in a refrigerator for ten months.

Dr. H. J. A. C. (Jersey).—We have been unable to trace the source of the matter referred to.

MOTHER SEIGEL, LIMITED.

We understand that the directors of that American importation, "Mother Seigel's Syrup," for which the astute discoverer (?) got nearly £1,000,000 from British investors, are about to propose to the unfortunate shareholders that the £1 shares be reduced to two shillings, as they find it impossible to pay dividends out of the profits of this huge capital.

United Services Club.—The individual about whom you inquire should be left severely alone. He has gone under various aliases, and was at one time connected with that notorious scoundrel Dr. Crippen. We greatly regret that the daily newspapers should accept the illgotten money of such a dangerous quack, while pretending to safeguard the interests of the community.

L. S. A. (Lewisham).—All cases of infectious diseases in and around London, are undertaken by the Metropolitan Asylums Board and the London Fever Hospital.

IMPERIAL CANCER RESEARCH FUND.

A correspondent writes to us as follows:—

"It is to be hoped that the Committee of the Fund will follow the example of the Sleeping Sickness Bureau and set to work on the compilation of a complete bibliography of Cancer and the collection and formation of a library containing every work, paper, lecture, etc., which has been published relating to the subject. We believe a suggestion has already been made to Dr. Bashford on this matter and he would be well advised to give it full consideration."

M.R.C.S. (Reading).—Both the Buxton Thermal and Chalybeate water can be obtained direct from the Municipal Springs. The Radiozone bath salts largely used in the Buxton treatment can also be purchased for the home treatment of patients. Fuller particulars can be obtained by writing to the Manager of the Mineral Springs, Buxton.

GERMINATING APPLE PIP IN APPENDIX.

A London evening journal reports that in the course of an operation for appendicitis on a young man at Haverfordwest, Pembrokeshire, the presence was revealed of an apple pip which had not only set up inflammation, but had actually begun to germinate.

Appointments.

Brown, W. G. S., M.R.C.S., L.R.C.P., Resident Assistant Medical Officer of the Prescot Union Workhouse.

Collins, E. A., M.R.C.S., L.R.C.P., District Medical Officer of the Blything Union.

Dowley, T. P., B.A., M.B., B.Ch., B.A.O.Durh., Certifying Factory Surgeon for the Lisbellan District, co. Fermanagh.

Frazer, A., M.B.Edin., M.B., C.M., Certifying Factory Surgeon for the Caistor District, co. Lincoln.

Hodgson, W. H., M.B., M.R.C.S., L.R.C.P., District Medical Officer of the Hyde Union.

Keir, I. C., M.D.Edin., M.B., Ch.B., D.P.H., Medical Officer of the Trowbridge and Melksham Union Workhouse.

Radcliffe, A. H., M.B., Ch.B.Vict., D.P.H., Certifying Factory Surgeon for the Gasford District, co. York.

Sharp, Miss A. C., M.B., Ch.B.Edin., Assistant Medical Officer of the Plymouth Union Workhouse.

Stewart, T. L. G., M.B., Ch.B.Glasg., Assistant Medical Officer of the Liverpool Union Brownlow Hill Workhouse.

Taylor, J. M., M.B., District Medical Officer of the Thorne Union.

Thompson, S. W., L.S.A., M.R.C.S., District Medical Officer of the Greenwich Union.

Vincent, W. H., L.M.S.S.A., House-Surgeon to the Evelina Hospital for Children, Southwark, S.E.

Vacancies.

Royal Victoria Eye and Ear Hospital.—Two House Surgeons. Salary £40 per annum with board. Applications to the Hon. Secretary, Adelaide Road. (See advert.).

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Abbeyfeale (co. Limerick), Bellanagh (co. Cavan), Castlegregory (co. Kerry), Corris (Merioneth), Dingle (co. Kerry), Ongar (Essex), Rathvilly (co. Carlow).

Buenos Ayres British Hospital.—Assistant Resident Medical Officer. Salary £200, rising £25 annually. First-class passage paid. Board and rooms in Hospital provided. Applications to Dr. Colbourne, Llanfair, Beckenham, Kent. (See advert.)

King Edward VII. Sanatorium, Midhurst, Sussex.—Junior Assistant Medical Officer. Salary £150 per annum, with board, lodging and attendance. Applications to the Honorary Secretary, 19 Devonshire Street, Portland Place, London, W.

Southwark Union, London.—Third Assistant Medical Officer. Salary £120 per annum, with board, lodging and washing. Applications to Sydney Wood, Clerk, Union Offices, Ufford Street, Blackfriars Road, S.E.

Lincoln County Hospital.—Junior House Surgeon. Salary £100 per annum, with board, residence and washing. Applications to the Secretary-Superintendent.

Kidderminster Infirmary and Children's Hospital.—House Surgeon. Salary £100 per annum and board. Applications to the Secretary.

Bolton Infirmary and Dispensary.—Senior Assistant House Surgeon. Salary £100 per annum, with board, apartments and attendance. Applications to W. W. Cannon, Esq., Hon. Secretary, The Infirmary, Bolton.

Parish of Leicester.—Poor-law Infirmary. Second Resident Assistant Medical Officer. Salary £130 per annum, with rations, furnished apartments and washing. Applications to Herbert Mansfield, Clerk to the Guardians, Poor-law Offices.

County Borough of Southampton.—Assistant Medical Officer of Health. Salary £200 per annum, with residence, board and washing. Applications to the Town Clerk, Municipal Offices, Southampton.

Coton Hill Lunatic Hospital, Stafford.—Assistant Medical Officer. Salary £150 per annum, with residence, board and laundry. Applications to the Medical Superintendent.

Births.

Corry.—On September 5th, at Liss, Hants, the wife of Harry Barrett Corry, B.A.Cantab., M.R.C.S., L.R.C.P., twin daughters.

Crean.—On September 13th, at 13 Queen Street, Mayfair, London, the wife of Thomas J. Crean, V.C., F.R.C.S., of a daughter.

White.—On September 4th, at Landour, N. India, the wife of Captain M. F. White, I.M.S., of a son.

Marriages.

Bacon—Bailey.—On September 9th, at St. Peter's Church, Hong-kong, the Rev. John Lionel Bacon, L.Th. Dur., son of the late William Bacon, of Hadleigh, Suffolk, and of Mrs. Bacon, Rosemont Road, Acton, W., to Charlotte Bailey, M.B., Ch.B. Birm., eldest daughter of Thomas Henry Bailey, M.Inst.C.E., of Portland Road, Edgbaston (C.M.S. Missionary at Kueilin, Kwangsi). (By cable.)

Baines—Ransome.—On September 11th, at the Mission Church, Lytton, British Columbia, Mark Blakiston Baines, M.B.Oxon., son of Mr. and Mrs. Henry Baines, of Oxford, to Violet Grace, only daughter of Mr. and Mrs. Stafford Ransome, of 15 Redcliffe Square, South Kensington.

Lees—Slater.—On September 11th, at St. Paul's Church, Avenue Road, William Donald, eldest son of David B. Lees, M.D., F.R.C.P., of 22 Weymouth Street, W., to Ida Lillian, youngest daughter of John Slater, of 11 St. John's Wood Park, N.W.

Deaths

Barry.—On September 9th, at his residence, Whitehead Road, Aston, Birmingham, Hart L. A. Barry, L.R.C.P. and L.R.C.S.I., aged 32.

Spitzly.—On September 11th, at 1 Douglas Road, John H. Spitzly, M.R.C.S., L.R.C.P.

Thomson.—On September 2nd, 1912, at Trinidad, of blackwater fever, Arthur W. D. Thomson, Colonial Medical Service, of Belle Garden, Tobago, B.W.I., second son of the late Deputy Inspector-General James Thomson, R.N., in his 41st year.

Thompson.—On September 10th, at 13 Cheyne Gardens, S.W., Reginald Edward Thompson, M.D., aged 78.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, SEPTEMBER 25, 1912. No. 13.

NOTES AND COMMENTS.

The Forcible Feeding of Suffragette Prisoners.

MR. BERNARD SHAW has risen to the opportunity for catching the ear of the public afforded him by the Suffragette outcry against forcible feeding. It is at times hard to analyse the buffoonery of the talented dramatist, but it seems fairly clear on this occasion that he upholds the action of the State in feeding perforce prisoners committed for such a felonious action as the attempted setting on fire of a theatre. If such persons are to be set free because they refuse their food then a similar privilege must be extended to burglars, forgers, murderers, and other criminals of every degree. Mr. Shaw apparently disapproves of all punishment, but unfortunately we cannot deal here with that tempting side issue. He also thinks that every imprisoned woman should be allowed to starve herself to death if she so wills. It does not appear that his great brain has ever considered the mental responsibility of women who refuse food under the peculiar circumstances. A woman who smashes a shop window, or sets a theatre on fire, because she objects to what is, in her opinion, a defective constitutional law, and when imprisoned for her offence against society refuses food as a further protest is hardly to be considered sane. At any rate, the refusal of food is a common and familiar act in lunatic asylums. Recently a small committee of individuals well known in the medical world have drawn up a report upon the results of forcible feeding. They might, with equal force and with much more literary effect, have dealt with the sufferings inflicted upon the inmates of asylums by the enforcing of similar measures. It seems clear enough that any authority which assumes the responsibility of shutting persons up in custody must keep them alive and look after their safety as far as possible. This applies to recognised and established lunatics as well as to Suffragettes and other sorts of criminals. There can be no special treatment meted out to Suffragette window breakers.

Forcible Bathing!

THE medical manifesto to which allusion has been made is difficult to follow. If it were part of an inquiry conducted into the physical effects of prison treatment generally by an impartial medical board the report would command our admiration and respect. As a piece of special pleading, however, put forward in favour of a small class of criminal offenders it is more likely to provoke ridicule than sympathy. In the *Lancet* of September 14th the incident is treated with Rabelaisian humour by Dr. Charles Mercier. His communication takes the form of a "Preliminary Report on the Forcible Bathing of Prisoners." He says that having approached the subject without the slightest bias in favour of the prisoners, or against the prisoners, he has elicited a series of facts wherewith he is enabled to give the lie direct to the assertion that the forcible bathing of prisoners is neither dangerous nor painful. The impartial method of investigation was by examining prisoners on their release and by leading questions addressed to the physicians who have attended them since that event. The facts adduced in this report merit the carful attention of all members of the community concerned in the administration of justice. "One prisoner," so the document runs, "I examined (V.Z.), a strong man of fine physique, was so seriously enfeebled by having one bath that he had to be removed to hospital some time afterwards, having in the meantime broken his leg, an occurrence which he attributes to the weakening effects of the bath; and he is but typical of a considerable number." The very nature of the regulation, as shown by the investigator, defeats its own purpose, in the following remarkable passage:—"According to the prison authorities, forcible bathing was instituted to keep the prisoners clean, for which, however, they have never dirty struck. But in the majority of cases it has had precisely the opposite effect, for it is found that dirt adheres far more readily to the fresh surface exposed by the action of the bath than to the inveterate dirt of years."

The Anguish of the Tub.

THE official theory that there is no danger in the bath is not borne out upon investigation, as shown by the following illustration. "B. S., a skilled chimney sweep, never resisted the operation. At Easter he had a bath once a week for three days. The anguish he experienced surpassed that of any wash he had had in previous years, and he completely lost his power of recognising even the most familiar objects. He did not even recognise his own face when he looked in the glass. This also was a type of many similar cases." The description of the physical injuries inflicted upon prisoners, if even remotely founded on fact, should arouse a storm of popular indignation. We are told that "during the struggle before bathing the prisoners were flung out of window, tossed over the roof, tied up in knots, jumped upon, and eviscerated. As might be supposed, severe bruises were thus inflicted." In another place we are told, "Though medical officers were informed in several cases that the prisoner was subject to nasal catarrh, no examination was made. The prisoners were usually flung into the bath and held there while water was flung over them. The intense pain so produced often forced uncontrollable oaths from the prisoners. In most cases headache, backache, earache, and bellyache—I mean severe gastric pains—as well as hydrophobia, which lasted through the forcible bathing, preventing sleep." This important document gives much additional information as to the effects of forcible bathing on the circulatory and nervous systems, and so on. Readers interested in the subject should consult the original document, which most certainly should be in the possession of Ministers who may be called upon to answer questions in the House upon the treatment of prison inmates. Dr. Mercier may be congratulated upon having made a solid contribution to the literature of a delicate and difficult socio-legal problem, and at the same time of having added to the gaiety of a serious and sober-minded profession.

The Motor Traffic Danger. THE danger to life and limb arising from motor traffic in town and country has at length reached breaking strain. The average chauffeur seems to think that having sounded his horn he is entitled to run over any obstinate person who may remain in his path. Last week a costermonger stepped into the road to pick up another man's cap. He was run over by a motor bus, and the evidence at the inquest appeared to show that the driver made no attempt to stop, although deceased ran several yards in front of the omnibus. Under such circumstances a charge of criminal recklessness in driving should surely come into consideration. Coroners' juries and magistrates are loth to bring in a verdict blaming the chauffeur, and we note that a South London medical man, stimulated by his experiences of motor disaster, has suggested the foundation of a public defence fund for the metropolis, with a view to the securing an exhaustive investigation into every fatal case of the kind. The statement, publicly advanced and capable of ready proof or disproof, that per vehicle each motor omnibus in London kills five or six times as many persons as a horse omnibus seems startling enough to awaken the slowest commercial conscience. Provincial towns that rule their own house appear to be able to control the evil. In London, however, the matter is in the hands of the police. In a former issue we suggested that the Chief Commissioner should have a map constructed localising motor deaths by means of pins with variously coloured heads, say, red for private motors, blue for trams, yellow for omnibuses, and so on. When Parliament meets it may be hoped that some member may ask for a return of such deaths, and at the same time seek for some explanation as to why the police have allowed this particular peril to attain such dimensions in London.

What of the Police and the Home Office? As a matter of fact the remedy for this grievous danger which stalks the streets of London by day and by night is in the hands of the police. The causes of the avoidable margin of deaths are few and simple. Excessive speed, immunity of drivers, excessive number of vehicles, want of proper investigation of accidents and deaths. As to speed there are official regulations of model type in existence, and these could be applied forthwith, if so wished by the authorities. They provide for the use by every vehicle of a device whereby a continuous alarm is sounded if the vehicle exceeds a given rate of speed. So that there need be no further dispute as to speed. Place such an indicator on every motor vehicle and it becomes its own infallible witness. The police, again, should be legally represented at every inquest, and the licence of every chauffeur implicated in a serious or fatal accident be seriously imperilled, and in case of several such occurrences be permanently revoked. It would be interesting to learn the individual record of deaths attributable to individual drivers of public motor vehicles. In view of the failure of local authorities throughout the Kingdom to deal with the dangers of motor traffic, in our opinion a Royal Commission or a Select Committee should be appointed at once on the reassembling of Parliament to collect authoritative information on the whole question. What about the Home Office responsibility in the matter?

The Eighth London Medical Exhibition. WE have pleasure in drawing the attention of our readers to the eighth London Medical Exhibition, which is to be held at the Royal Horticultural Hall, Vincent Square, Westminster, in the week beginning the 30th September and ending on the 4th October. Tickets of invitation are sent to every medical man residing within a 50-mile radius of the hall, but those not thus included can obtain cards on application to the Secretary, 194-200, Bishopsgate, London, E.C. Of all organisations of the kind this appears to be easily the first in attractiveness to medical men. The reason for this preference is not far to seek; it will be found in the admirable way in which the arrangements are carried out. The imposition of an admission fee of five shillings to all but members of the medical profession practically shuts out the general public. As a result medical visitors are enabled to make the round of the exhibits in comfort, a privilege that was certainly conspicuous by its absence in the case of exhibitions of the sort attended by the outside public. Another attraction so far as the profession is concerned lies in the variety and comprehensiveness of exhibits bearing on every phase of medical practice. Here, at a glance, the practitioner, whatever his special wants may be, can inform himself of the latest mechanical and scientific developments placed at his disposal by the combination of commercial enterprise with advanced medical science.

LEADING ARTICLES.

THE REGULATIONS FOR MEDICAL BENEFITS UNDER THE INSURANCE ACT.

AFTER what must have appeared to many of our readers a long and wearisome delay, it is announced upon what appears to be good authority that the State Insurance Committee of the British Medical Association is now in possession of the final terms of settlement proffered by the Government to the medical profession. The announcement is made in the *Times* of September 23, 1912, with an air of authority that, coming from such a source, must be accepted as of good warranty. The regulations, we understand, have not been settled in final form, so far as wording goes, but will shortly be redrafted. They were sent by the Insurance Commissioners to the State Sickness Committee as an act of courtesy, and not in order to invite their opinion as to suggested modifications, for as negotiations have been broken off between the British Medical Association and the Government the former have no *locus standi* in the matter. To this is added the statement that it is possible the Commissioners may accept one or two minor points which the doctors may urge.

The Regulations, says the *Times*, are said by some experts to give ground for hopes of a settlement. The question of remuneration for medical attendance is left to the local health committees, who have the option of arranging payment on any of the four following bases :—

(1) Capitation only.

(2) A small capitation fee with some payment for special services.

(3) Payment for special services with a small capitation fee.

(4) Payment by attendance only.

The difference between (2) and (3), it is explained, is that in the former the capitation fee, though small, is the main basis of the proposal; in the other the main basis is the payment for special services. It is anticipated that the State Sickness Committee will now draft a report to be sent to all the members of the British Medical Association. In the meantime the Committee has, it is stated on authority, received assurances that at the next Cabinet meeting, the one which will immediately precede the opening of Parliament, Mr. Lloyd George will make a statement on the situation. He is expected to point out that the reserve sums under his original proposals which had been set aside to meet unexpected outlays have been swallowed up by acts of generosity adopted by the House of Commons for the benefit of the contributors. These, therefore, could not be applied to meeting the claims of the doctors, claims which to a large extent he had always recognised as being substantially just, claims which he had always admitted would have to be partially met. He will therefore suggest that when Parliament reassembles it should be asked to vote a special percentage out of State funds towards the Insurance Fund. At the present time it is not known what this sum will be, but it may be 2 per cent. It is certainly not likely that Mr. Lloyd George will propose that a specific amount of money should be voted, or that the State will be asked to increase its contribution towards each case of insurance. There is no doubt that the Cabinet will agree to this course. Our readers will please note that the foregoing important statements are quoted from the *Times*. The next step on behalf of the British Medical Association will doubtless be to circularise and ascertain the views of the medical profession as a whole. Later, the final decision will probably be arrived at by the meeting of representatives to be held in November next. On the whole, it may be said that the Regulations, if the *Times* view be correct and well-informed, have somewhat lightened the situation. At the same time the medical profession will do well to persevere in the organisation of a public medical service for reasons that have been fully discussed in our columns on former occasions.

At the moment of going to Press we find that the *Times* has published what amounts to a direct contradiction of the foregoing statements, so that our readers will have to accept any rumours that may be circulated for the next few days with much caution.

THE POSITION OF DENTISTRY.—I.

If the secret history of medical law reform be one day written, the part played by the Medical Press may be perhaps revealed. The difficulties of getting at the general public through a medical paper are insuperable, but there are available means of bringing medical questions of national interest forcibly to the notice of statesmen, Members of Parliament and public men; and these have been continuously employed in recent times. These efforts helped largely in the promotion of the Parliamentary inquiry into the quack medicine trade. The evidence gathered by the Select Committee will at least greatly strengthen the demand for a similar inquiry into the whole position of medical law. That inquiry must, of course, include the Dentists Act. We propose to bring this question to the front; and, seeing that the story of the rise of dentistry is not known to many medical men or even to dentists of the younger generation, it may be well to start with a brief account of the genesis of the Dentists Act. Although there had been for many years a number of qualified men engaged in dentistry, a dental profession cannot be said to have existed in this country prior to the year 1858. In that year the Royal College of Surgeons obtained through the new Medical Act powers for the creation of a Licence in Dental Surgery. The need for measures to improve the status of dental practitioners had been recognised long before, and much had been done to promote them. The final success was in great part due to the personal position of leading dentists. Some of these were Fellows of the Royal Society; others held degrees in medicine or surgery; many of them were known as serious workers in science. The Medical Act of 1858 gave no power to compel practitioners of dentistry to qualify. It remained still possible for anyone, devoid of professional education, to practise, and use, with impunity, titles implying the possession of a valid diploma. It was left to the option of pupils whether they would obtain a voucher of their professional competency, and between the years 1858 and 1878, a considerable number of students went through the educational course and became qualified. A considerable minority became fully qualified surgeons; others took degrees in arts or science. The existence from the first of a large number of dentists holding high academic degrees, besides a dental diploma, has tended to bind the speciality closely to the medical profession. Diseases of the teeth are often enough alone to make life as wretched as it can be made by any form of physical suffering. In a not inconsiderable proportion of cases dental diseases form the cause of morbid conditions of the general system. In another class of cases affections of the teeth are in causal relation with grave surgical diseases of the mouth and jaws. To treat maladies other than those strictly dental falls beyond his province, but if the dentist be a mere mechanic he must often ignore conditions the early recognition of which would have averted serious or disastrous results. Of this fact illustrations can be seen among the patients of every hospital—among the poor and ignorant, whose cases are so often neglected until too late. Operative dentistry is a highly technical system of surgical handicraft, calling for a high degree of manual training. In what seem purely mechanical processes, scientific thought has been brought to bear, and the operator lacking knowledge must inflict unnecessary pain and injury. This equally applies to what looks at first sight the most purely mechanical of all the operations of dentistry—the construction of artificial teeth. The operation of extracting teeth calls for diagnostic skill. Toothache is very commonly neuralgic in character, and when of local origin, the pain arising from one tooth is often reflected on to another. An operator who indiscriminately extracts teeth which the patient points to as the source of suffering must, in a large proportion of cases, draw a wrong tooth, and often sacrifice a sound one. In the great majority of cases needing artificial teeth, diseased teeth are present, and unless the patient is to be condemned to constant pain and discomfort, and exposed to the perhaps mortal dangers of septic infection, these must be brought into a healthy state before artificial teeth are inserted. The calamitous results of septic mouth as displayed in the victims of dental quackery were graphically described by a "Hospital Dentist" in our Correspondence columns last week. Considerations such as the foregoing gave impulse to the movements for dental reform, and induced medical authorities and Parliament to give to dentistry the professional status it had been shown to deserve. It was, however, not until 1878 that legislative sanction was given to dental reform. By the Dentists Act of that year dentistry was placed under the direction and control of the General Medical Council. The substance of the penal section of the Act is as follows: "From and after August 1st, 1879, a person shall not be entitled to use the title of 'dentist,' or of 'dental practitioner,' or any title or description implying that he is registered under this Act, or that he is a person specially qualified to practise dentistry, unless he is registered under this Act.' Any person who, after August 1st, 1879, not being registered under this Act, takes or uses any such aforesaid title or description shall be liable on summary conviction to a fine not exceeding twenty pounds." In order that no hardship should be inflicted, it was provided that every person who at the passing of the Act was in the *boná fide* practice of dentistry should be entitled to registration. On completion of the first Register, it was found that 5,289 names had been entered of such persons, and of these only about 10 per cent.—actually 533—had produced any evidence of dental education. The story of the gradual encroachment of the unqualified practitioner and finally of the virtual nullification of the protective clauses of the Dentists Act by a judgment of the House of Lords, has been from year to year told in these pages.

We propose to discuss the present position of the dental profession, and to indicate remedies for existing abuses, in a series of articles. In this crusade the help of qualified dentists is cordially invited, not merely on the ground of their own interest, but also of the whole profession to which they are allied, and of the public who are suffering most injury through the present state of things.

CURRENT TOPICS.

Tuberculosis and the Insurance Act.

To the ill-informed pseudo-humanitarian, and to the simple sentimentalist, the question of the treatment appears more important than that of the prevention of tuberculosis. Cases in the incipient or advanced stages of the malady excite the utmost pity, and the demand follows that every means which medical science and art are able to furnish shall be employed in the endeavour to cure or prolong the lives of sufferers. If the question be viewed in the dry light of science it is none the less evident that the same amount of energy devoted to prevention would more speedily put an end to a far greater mass of human suffering and misery; and it seems clear that if the resources of the State do not suffice to deal with the two things at the same time it would be better to concentrate effort on the problem of prophylaxis. In this the housing question comes first. The slum and the slum-dwelling form the hot-beds of tuberculosis. Next, perhaps, comes the question of infection through milk and tuberculous flesh-foods. The enormous cost of dealing effectively with these sources of the disease has been recently exposed in these columns; but it is hardly doubtful whether it would not, in every sense of the word, pay better to devote the money proposed to be expended on sanatoria to the stamping out of bovine tuberculosis, and putting an end to the traffic in tuberculous meat. These seem evidently the opinions of Dr. Crocker, the medical officer to the Richmond Town Council. After an examination of the Surrey County Council scheme for dealing with tuberculosis, Dr. Crocker states that Richmond can provide the same facilities at half the cost. The county scheme, he says, would result in overlapping of duty, division of responsibility, and friction in administration. The chief object is the prevention of tuberculosis; and the prevention of overcrowding, house to house inspection of small property, and improvement in sanitary surroundings will, he urges, be of far greater advantage than "tinkering with the individual by sanatorium or dispensary treatment" after he has contracted the disease. Guided by this advice, the council have decided that a *prima facie* case has been made out for an independent local scheme, and have resolved to ask the Local Government Board to defer passing the county scheme in so far as it relates to Richmond. It is to be hoped that many other urban authorities throughout the country will follow the example of the Richmond Council.

The Prevention of Consumption.

Since the foregoing paragraph was written, there has been published an appeal, signed by Lord Balfour of Burleigh, Mr. George Harwood, M.P., and Mr. J. J. Perkins, for £10,000 in aid of the National Association for the Prevention of Consumption. The appeal emphasises the truth we have always insisted upon—"it is good to cure consumption, but it is infinitely better to prevent it." The appeal rightly insists that prevention must lie in the hands of the people themselves, but the nation requires to be taught how to defend itself. It may be said that the Government has taken over the control of consumption, and that there is, therefore, no need for outside help. But this is far from true. The National Insurance Act, so far from diminishing the need for voluntary effort, has actually opened up a new field for work, and the people need to be aroused to take advantage of the great openings to be provided under it. The appeal urges that the record of the Association is the best proof of its fitness for this task. Though it has provided more than 600 beds for sanatorium treatment, this has been incidental to its main work, which has always laid in the domain of education. The plan which has proved most effective is by means of (1) travelling exhibitions, consisting of diagrams, models, and pictures, giving a complete illustration of the causes of tuberculosis and the prevention and treatment of the disease; (2) caravans of a similar nature and popular lectures; (3) the distribution of literature. The exhibitions are held in the larger centres of population, while the caravans tour the country districts. Everywhere the people are eager to learn. The opening exhibition in Whitechapel attracted in 17 days 70,000 of the people who most require the instruction offered. It has since visited 50 boroughs, and everywhere a like anxiety to learn has been shown. The total attendances have reached nearly one million.

Independence Day of 1912.

Almost since the first celebration of the declaration of independence of the United States of America, the 4th of July has been the notorious occasion for wholesale self-destruction and mutilation all through America. Nearly as many inhabitants of the States have perished in the celebration of independence as in its acquirement. It was, perhaps, the inevitable result of the reaction against despotism that the free citizens should ignore any regulations passed by their lawgivers, to ensure public safety. As lately as 1903, 466 persons were killed on the 4th of July, and of these 406 were the victims of tetanus. This year 41 persons lost their lives, including 6 deaths from tetanus. The causes of this smaller death-roll are both general and particular. The American citizen is gradually becoming more law-abiding and considerably less of a child, but much improvement is necessary still, for 41 senseless deaths and 947 people rendered blind or otherwise mutilated by explosives is too large a toll to pay for the questionable privilege of excessive individual independence. The more particular reason for the diminished number of tetanus cases lies in the adoption of more rational methods of wound treatment. Since practitioners have become careful to treat all wounds inflicted by explosives by the open method, the death-rate from tetanus has steadily diminished. Many hospitals use a solution of 5 per cent. carbolic with 0.5 per cent. hydrochloric acid as the immediate antiseptic for wounds, and an increasing number give routine prophylactic injections of anti-tetanic serum. As soon as rational methods of enjoyment and medical treatment are initiated, so soon does improvement begin, and that improvement is inevitably permanent.

The Relation of Athletics to the Reproductive Life of Woman.

With the growing popularity of athletics amongst women, there is increasing discussion in regard to the effects of active physical exercise on the birth-rate and on general feminine physique. There are those of the older school who would have us believe that any violent sport such as hockey or tennis undertaken during the menstrual period has a serious effect on a girl's physical well-being. Others of a more modern type hold that menstruation proceeds more smoothly and naturally when there is no extraneous stress thrown on the body. Individual variations are so marked that we have absolutely no data on which to base far-reaching conclusions. As a rule we think that it is safe to allow girls to follow their own inclinations as to whether they should engage in active sport or not during the period of menstrual flow. In schools and colleges it cannot be wise to make games compulsory during this period; and if a girl obviously ignores her sexual functions for the sake of games it is the duty of the instructor to prevent her overtaxing her strength. We have abundant evidence that mental overwork about the time of puberty may be fraught with disastrous consequences, and to a lesser degree we would expect ill effects to follow physical over-exertion. With regard to parturition the results of an investigation recently published in the *American Journal of Obstetrics* show that the general condition of athletic patients during child-birth is much better than that of non-athletic individuals, and that labour itself is accomplished with few complications and with relative ease. With regard to displacements of the uterus, these can be brought about by violent exercise during menstruation, but such a cause of malposition cannot generally be definitely ascertained. The end of the matter is that moderation is good, excess evil, and compulsion iniquitous, and that we have to give our girls credit for the common-sense which only credit can give.

PERSONAL.

Lieut. C. H. Smith, I.M.S., has been appointed a Specialist in Advanced Operative Surgery.

Dr. P. J. O'Farrell has been appointed Assistant Physician to Temple Street Children's Hospital, Dublin.

Dr. Thomas Roberts, of Wrexham, has been appointed County Medical Officer of Health for Denbighshire.

Dr. R. E. Harrold, M.B., Ch.B.Adel., has been appointed Honorary Dermatologist to the Adelaide Hospital.

Mr. John Morley, Ch.M.Manch., F.R.C.S., has been appointed Honorary Surgeon to the Ancoats Hospital, Manchester.

Dr. J. Bell Ferguson, M.B., Ch.B.Edin., D.P.H. Manch., has been appointed chief Tuberculosis Medical Officer for the County and City of York.

Dr. H. J. Macintosh, Medical Superintendent of the Western Infirmary, Glasgow, has been elected Chairman of the British Hospitals Association for the ensuing year.

Dr. G. Morrison, the Political Adviser to the President of the Chinese Republic, with Mrs. Morrison, have now left England for Peking, travelling viâ Berlin and Moscow.

Dr. J. King Patrick, M.B., Ch.B., B.Sc.Glas., D.P.H.Dub., has been appointed Assistant Medical Officer of Health and Medical Officer in Charge of the Tuberculosis Dispensary for the County Borough of Leicester, *vice* Dr. J. Bell Ferguson.

Dr. G. Stopford Taylor, of Liverpool, will deliver the opening address before the New London Dermatological Society on Thursday, October 10th, at 4.30 p.m., at the Western Skin Hospital, Hampstead Road, N.W., on "Some Practical Points in the Treatment of Eczema." All practitioners are cordially invited.

A CLINICAL LECTURE
ON
SYPHILIS OF THE NERVOUS SYSTEM, ILLUSTRATED BY THREE CASES.

By H. L. McKISACK, M.D., M.R.C.P.,

Physician to the Royal Victoria Hospital, Belfast.

THE effects of syphilis upon the nervous system are extremely varied, as regards both their situation and their clinical signs. We must bear in mind that there is no region of the nervous system immune to syphilitic processes, and, further, that these processes have nothing distinctive or pathognomonic in their character, whereby they may be recognised with certainty. It is only by the history, by the results of treatment, and by the presence of the Wassermann test that one perceives the specific factor in the case. The fact that so many diseases of the nervous system are hardly, or not at all, amenable to treatment, makes one welcome the evidence of syphilis in these diseases, and it is fortunate that this is not a rare occurrence; a fair proportion of diseases of the brain and spinal cord being of syphilitic origin. In many cases of syphilis of the nervous system there are grounds for a hopeful prognosis. Unfortunately, there is also a large group of nervous diseases occurring in syphilitic subjects for which the anti-syphilitic treatment is useless. These are the so-called metasyphilides or degenerative affections of the brain and spinal cord occurring at a later period in the syphilitic patient's life. Of these the following may be mentioned: general paralysis of the insane, locomotor ataxia, spastic paraplegia, and some forms of myelitis and dementia.

These diseases are, in many cases, but not in all, the result of syphilis, which produces such changes in the nutrition of the nervous tissues, as renders them liable to degeneration or chronic inflammation. The situation in which the diseased condition mainly occurs, accounts for the variety of disease under observation. Thus in locomotor ataxia, it is chiefly the posterior columns of the cord that are affected. In general paresis there is a widespread affection of the surface of the brain with, in many cases, lesions of the cord involving both posterior and lateral columns. If the lateral columns are chiefly attacked, syphilitic spastic paraplegia is the result. These and similar degenerative lesions cannot, as has just been stated, be regarded as syphilitic diseases of the nervous system, but as degenerative changes which occur very frequently in individuals who have previously suffered from syphilis, and the vitality of whose tissues has been injuriously affected by the poison.

Diseases of the nervous system directly the result of syphilis occur almost exclusively in the tertiary stage of the disease. In the earlier stages organic changes in the nervous system are not at all likely to occur; at an rate, not more than could be accounted for by coincidence.

It is not only in the acquired disease that nervous lesions occur; in cases of hereditary syphilis almost every variety of syphilide may be found, with in addition various developmental abnormalities.

With regard to the region of the nervous system which may be affected, the brain and the spinal cord are most frequently the seat of syphilitic disease. The peripheral nerves, however, though rarely involved, are not entirely exempt from the disease. Syphilis, in common with other diseases, may attack the tissues adjoining the nervous structures, which may be injured, without being themselves the seat of syphilis. Thus syphilitic tumours of the skull, or of the bones of the spinal column, may, by pressure, cause disease of the brain or cord, but cannot be regarded as syphilis of the nervous system.

(*a*) The commonest specific lesion in the brain and spinal cord is a form of meningitis, with which may be found some inflammation of the nerve tissues, and of the arteries. From two to ten years after the infection, inflammatory exudation of a gummy character may appear. It is specially found at the base of the brain in the neighbourhood of the chiasma, crura and pons, but may occur elsewhere in the cerebro-spinal canal. The symptoms produced by this exudate resemble closely those of a tumour, not only on the surface, but in the substance of the brain or cord. The condition thus produced may be regarded as meningitis with tumour, or inflammation of the adjacent brain or spinal cord, that is syphilitic meningo-encephalitis or myelitis, producing in some cases considerable areas of softening. In other cases the lesion may take the form of small scattered spots producing sclerosis, or, on the contrary, softening of limited areas. The result is a group of symptoms closely resembling multiple sclerosis or general paresis, with the important difference, however, that the purely syphilitic disease which we are considering is favourably influenced by anti-syphilitic treatment, while the affections just mentioned, even if they occur in a syphilitic subject, are not usually benefited by mercury or iodide of potassium.

(*b*) At times arteritis is the only discoverable lesion, and may give rise to no definite symptoms until the vessel becomes the seat of thrombosis, or ruptures, when the usual symptoms develop in accordance with the situation and extent of the lesion.

(*c*) Gummatous deposits on the cranial or spinal nerves may occasionally be found giving rise to pain, paræsthesia, anæsthesia, or paralysis. The symptoms are those of neuritis of the nerve affected, with possibly local pressure symptoms, should the gumma be of sufficient size.

(*d*) A fourth group of nervous disturbances of syphilitic origin comprises cases of functional disorder of the nervous system, without physical signs of organic lesion. In these cases neurasthenia, insomnia, headache, etc., may be the chief disturbances, and may be recognised by their response, more or less prompt, to anti-syphilitic remedies as well as by their history or by the Wassermann reaction.

It may, indeed, be said that it is only by the indications just mentioned we may hope to identify the syphilitic character of nerve diseases, which are hardly distinguishable by any characteristic symptoms from those of non-syphilitic origin. A few points, however, may be mentioned, which are of assistance in diagnosis. In the diffuse type of syphilitic basal disease severe paroxysmal headaches are an early sign, and are often worse at night. There is stupor and perhaps excitement, but more intermittent and less progressive than in ordinary tumours of the brain. The region of the chiasma and crura being often involved, we naturally find in many cases optic neuritis and oculo-motor paralysis. One or more muscles of the eyeball may be affected, and ptosis is common.

Treatment in these cases is that appropriate to the tertiary stage of syphilis—viz., iodide of potash, mercury by oral administration and by inunction, and salvarsan.

In illustration of certain of the above-named varieties of syphilis, the three cases before you, of which the following is a brief account, will be of interest.

Case 1.—D. F., a policeman, aged 30, suffered from syphilis about four years ago, and seems to have had fairly active treatment at the time. He gave a positive reaction to the Wassermann test. About six months ago he began to have headaches, not specially nocturnal: indeed, they were if anything worse in the morning, wearing off to some extent during the day. The headache was mainly frontal, but was also occipital. When the headache was at its worst he frequently vomited, without much sensation of nausea. About three months before admission to hospital he felt so ill that he went to bed, and has been bed-ridden practically ever since. About a month ago he says he had difficulty in expressing himself in words, though he did not lose consciousness, and he noticed that when the headache was severe he had pricking sensation in the left arm, in the shoulder, down to the fingers, and a similar feeling of " pins and needles " in his lips, better marked on the left side. He thought the power of his left hand and arm was deficient.

On admission there was no evidence of loss of power in any portion of his body. Tactile, painful and thermal sensibility were normal. Reflexes (including those of the pupils, bladder and rectum) were normal. His gait was normal, and he had no subjective symptoms referred to the legs. He still complained of the arm and lips as just described. His sight was defective, both for near and distant objects, and on examining his eyes choked disc was found on both sides. In this case the lesion was obviously intracranial and on the right side. The fibres of the motor tract, likewise those conveying sensory impulses, had suffered no interruption. The papillitis, together with the vomiting and headache, suggest tumour rather than a circulatory lesion, hence a gumma in the neighbourhood of the sensori-motor area of the right cortex is the probable diagnosis.

Case 2.—S. A., aged 38, a labourer. About 18 years ago he suffered from syphilis and was under somewhat intermittent treatment for about two years, during which time his health was far from good. He subsequently married, and his wife, though said to be healthy, has had no children. About four months ago the patient had to give up his work owing to pain of a darting or stabbing character round his chest. A year ago he began to lose control of his bladder, and has since then suffered from incontinence of urine. On admission to the hospital he was found to be fairly well nourished; his alimentary, circulatory and respiratory systems were in good order; his gait was slightly spastic, particularly as to the left leg; there was no definite loss of power, nor atrophy of muscles. His tactile sensation was normal, but his discrimination of heat and cold was imperfect in the legs and lower half of the trunk. Pain sense is normal. Reflexes: knee-jerks are increased, especially in the left leg; ankle-clonus absent; Babinski absent; abdominal and epigastric reflexes present. The rectum is normal; there is incontinence of urine. A hypersensitive band is found on the thorax about three inches wide, encircling the chest about the level of the fifth, sixth and seventh dorsal vertebræ, and best marked on the left side. There is slight optic atrophy in the left eye. Wassermann positive.

The localisation of the lesion in the mid-dorsal region was fairly complete, and constituted a partial transverse obstruction of the cord, and at the same time supplied an irritative lesion to the nerve roots in its vicinity. The lesion may be diagnosed as a meningo-myelitis of specific origin in the mid-dorsal region of the cord. The perfect tactile sensation with defective thermal sense noted in this case is interesting, as some degree of " dissociated anæsthesia " has been described in cases of this nature.

Case 3.—A somewhat similar condition of affairs, but with important differences, is to be found in the case of J. M., aged 36, a van-driver, who had been in good health until ten years ago, when he had an attack of syphilis. He seems to have had a fairly efficient course of treatment. In May, 1911, he felt out-of-sorts and soon went for a holiday, but on returning he felt weaker than when he went away. He was unsteady in his gait and had shooting pains down his legs. He took to his bed in August, 1911. He complains of a pain in the small of the back, and a numbness from about three inches above the iliac crest to the toes. On examination, the alimentary, circulatory and respiratory systems are normal. In the nervous system the following changes have to be noted. There is loss of power of both legs, the right being the weaker; he is able to walk but with a spastic gait; the muscles of the legs are in a condition of tonic spasm. There is slight loss of tactile sensibility in the legs. The pain sense is unaffected. The reflexes are increased—viz., Babinski's sign is present; there is ankle clonus; knee-jerks are increased, and the supinator and other arm jerks are pretty well marked. There is complete incontinence of urine, and the rectum is only partially under control. There is no definite abnormality in the appearance of the fundus oculi. Wassermann's reaction is present.

The chief differences to be noted in this case from the previous one are, the absence of marked sensory symptoms, and the greater degree of transverse interruption of the cord. It is by the area of numbness or defective tactile sensibility, together with the increased reflex activity in the legs, that one can locate the lesion in that portion of the spinal cord immediately above the lumbar enlargement.

The sensory disturbance caused by interference with the posterior nerve roots in Case 2 are in this instance represented by a certain numbness, the lesion being, in other words, an obstructive rather than an irritative one, and the obstruction affects both the sensory and the motor impulses. While a similar diagnosis to the previous case (meningomyelitis) is possible, the meningeal characters of the complaint are less obvious, and a specific myelitis or a gumma of the cord is the more probable lesion.

In all three cases, iodide of potassium, in doses of from half drachm to one and a half drachms per diem, together with mercury, is being administered, and a gradual, slight, but definite improvement has already been noted in each case.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal, The lecture for next week will be by Professor Lafforgue, M.D., Medecin-Major, Val-de-Grâce, Paris. Subject: "Pneumococcic Meningitis."*

ORIGINAL PAPERS.

ON SOME OF THE RARER FORMS OF BREAST CANCER.

By W. SAMPSON HANDLEY, M.S., F.R.C.S.,
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It would serve no useful purpose to repeat the familiar clinical facts about breast cancer which are to be found in the text-books, but there are certain anomalous forms of breast cancer which are yet sufficiently frequent to be of great practical importance. Moreover, it should be the aim of the practitioner to diagnose, or at least to suspect, breast cancer before the usual clinical signs are fully developed.

Whenever a tumour, a swelling definitely palpable with the flat hand, appears for the first time in a woman over forty, the spectre of cancer rises, no matter how innocent the characters of the tumour appear to be. Any such tumour should be at once explored, unless careful examination indicates that the swelling is due to chronic mastitis. The exception is an important one. Indurations due to chronic mastitis have very definite clinical characters, which enable a skilled observer to pronounce upon their nature with a near approach to certainty. Such patients form a considerable percentage of those who develop swellings in the breast after the age of forty, and they can be treated successfully, as a rule, without operation. The exploration of all cases of mammary induration as a routine measure is accordingly to be deprecated.

Let us now consider three forms of breast cancer in which some or all of the text-book symptoms, such as adhesion, retraction and elevation of the nipple, and enlargement of the axillary glands, may be absent.

Early Cancers.

It may sometimes be possible to feel a carcinoma in such an early stage that the characteristic signs are absent for this reason alone. The presence of a small, hard swelling, more or less rounded in shape and fixed in the substance of the breast, will be the only fact observed. Careful manipulation fails to show adhesion to skin or fascia. Pain is conspicuously absent. The lump is single, and is not elastic nor fluctuating. The uncertainty of such cases can be resolved only by exploratory operation, and this should be undertaken without delay.

The exploratory operation should be a restricted one, made through a small incision. If an extensive operation is done, and especially if a tumour, presumed to be innocent, is removed by Gaillard Thomas's method of plastic resection, the difficulties in the way of a satisfactory subsequent operation for carcinoma, should it prove to be necessary, are almost insuperable.

Mobile Carcinoma.

Certain cancers, to which I have ventured to apply the term "mobile carcinoma" (*a*), exactly simulate a fibro-adenoma. In my experience a supposed fibro-adenoma, beginning after the age of forty, is more likely than not to be a cancer.

It is often wrongly assumed that all cancers become fixed in the substance of the breast, but this is not the case unless the growth is spreading at its margins by infiltrating the surrounding tissues. Certain cancers, instead of infiltrating, increase in diameter, mainly by a process of "centric" growth, that is to say, by pushing aside the surrounding normal tissues. Between the cancer and the surrounding tissues a special layer of stroma is developed, which forms for the tumour a capsule almost as definite as that of a fibro-adenoma. The capsule may be complete even upon histological examination, and in such cases the tumour is quite mobile in the breast, and may even be enucleated without much difficulty. Such tumours are slow in acquiring adhesions to skin or fascia, and probably also in infecting the axillary glands. Clinically, they may thus be absolutely indistinguishable from a fibro-adenoma. At the operation the tumour, in some cases, shells out of its bed without much difficulty, though seldom so easily as a typical fibro-adenoma. In such cases microscopic examination is the only safeguard against a ghastly mistake which will probably be fatal. For although these tumours appear encapsuled, it is unlikely that their surroundings are entirely free from microscopic invasion, and recurrence near the scar is probable within a short time.

These exceptional cases of mobile carcinoma lead to conclusions of the greatest importance: (1) In women approaching the cancer age all rounded tumours of the breast, especially if single, must be at once explored, no matter how innocent they appear. (2) It is very easy to be content with a rough naked-eye examination of a tumour which is thought to be innocent. The omission of the microscopic examination of a presumably innocent tumour of the breast is a dangerous neglect of duty. All tumours of the breast after removal must be submitted to microscopic examination.

Peripheral Carcinoma.

A cancer may commence in an outlying lobule quite separate from the main body of the breast. It is possible that some of these outlying growths begin in supernumerary mammæ. In such cases there is rarely much difficulty in diagnosis, for the tumour, instead of being enveloped in a thick mass of fat, is very close to the skin on the one hand and the fascia upon the other.

Consequently, dimpling and adhesion to the skin and fixation to the fascia soon become manifest. The only danger is that the clinician may be misled by the small size of the tumour, and may estimate its importance accordingly. It is, of course, conceivable that an observer, unaware of the existence of this type of carcinoma, may regard the small dimple in the skin and the underlying tiny lump as of no practical importance, for the breast itself appears normal. In these cases early diagnosis is of especial moment, for the prognosis of peripheral carcinoma is worse than if the tumour is situated in the substance of the breast. There are two main reasons for this fact, one inevitable and one avoidable. Whereas a central cancer is separated from the ribs and intercostals by the whole thickness of the great pectoral, a peripheral cancer is likely to be separated from the ribs only by a relatively thin layer of muscle, through which permeation can more rapidly make its way. Infiltration of the chest wall proper and of the underlying pleura will consequently occur at an earlier date, and dissemination in the internal organs is correspondingly accelerated.

The second or avoidable reason for the bad prognosis of peripheral growths lies in the fact that they have not been excised upon sound principles. It is a fundamental rule of cancer surgery that the primary growth must always be at the centre of the area of tissue excised. This rule is a deduction from the permeation theory of dissemination. In the past it has been usual to deal with peripheral growths by almost the same operation which would be employed for a growth situated beneath the nipple. The line of section is taken very close to

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(*a*) "Archives of the Middlesex Hospital." No. X.

the growth, and under such circumstances recurrence is very likely.

I have at present under my care a case of ulcerated peripheral cancer situated accurately in the middle line, just above the ensiform cartilage. The patient is an old lady of 65. The growth forms an irregular ulcer about an inch in diameter, with a sloughy base and hard raised edges surrounded by subcutaneous induration. The mass, which could be covered by a florin, is firmly adherent to the sternum, and therefore inoperable. Enlarged, hard, painless glands are present in both axillæ. Had the growth been operable it would have been necessary to clear out both the axillæ, for the median situation of the growth gives it simultaneous access both to the right and left axillary glands.

Among the unusual forms of breast carcinoma is the columnar-celled variety, which originates in the ducts. To the microscope duct cancer presents itself in two forms: one, that in which the growth originates in the large ducts; and, secondly, that in which the growth originates in the small ducts. The latter form is frequently indistinguishable from ordinary scirrhus of the breast, and need not here detain us, since it has only a pathological interest. Duct cancer beginning in the large ducts originally springs from an innocent duct papilloma, and there is accordingly a history of blood-stained serous discharge from the nipple existing for a period of some years before the patient seeks advice. Typical duct cancer is most frequently met with after middle age, and is of slow development and somewhat low malignancy. The tumour is generally found immediately beneath the nipple, which is not retracted; for a long time it remains mobile under the skin and upon the fascia, and there is no shrinkage or puckering of the breast. Moreover, the disease is slow in affecting the axillary glands. It will thus be seen that this form of cancer imitates, in many respects and for a long time, an innocent tumour of the breast. In an early stage a distinction may be impossible except by exploration.

Acute Cancer of the Breast.

A terrible form of breast cancer, known as acute cancer or mastitis carcinomatosa, is fortunately rare. It is found only in comparatively young women who are healthy at the time of its development. This form of growth generally develops during lactation, although it may be found in the unmarried. The whole breast becomes enlarged and swollen, the skin shows an erythematous blush and is hot to the touch. It may be swollen and œdematous, and sometimes presents the typical orange rind appearance. The nipple may either be retracted or may be swollen by lymphatic œdema. In some cases it is only a portion of the breast that forms the tumour, and in such cases the swelling is sector-shaped like the indurations of chronic mastitis. It is only in acute carcinoma that the tumour presents this shape, which is otherwise characteristic of innocent conditions of the breast, and especially of chronic mastitis. Even in cases where only a part of the breast is at first involved, the whole breast is rapidly converted into a large tumour, which becomes firmly fixed over its whole extent, both to the skin and the fascia. Within a few weeks the thoracic wall may show the appearance of cancer *en cuirasse*. The thick and rigid skin, now immobile upon the chest wall, is covered with nodular growth. General dissemination rapidly occurs, and within from six weeks to three months after the onset of the disease the patient is dead. Operation in such cases is useless. Not infrequently acute cancer of the breast has been taken for mammary abscess, and has been excised under this impression. It must be remembered that lymphatic œdema of the skin presenting the characteristic orange rind appearance may be present over a pointing mammary abscess; but while in the case of an abscess the *peau d'orange* area is a small one, in acute carcinoma the lymphatic œdema of the skin is co-extensive with the breast, and, moreover, the affected area of skin is often indurated from incipient cancerous infiltration and closely adherent to the underlying breast. The breast in this form of carcinoma is firmly fixed to the chest wall, which is not the case in acute mastitis.

INFLAMMATORY TUBERCULOSIS WITH NEOPLASTIC TENDENCIES: ADENOMA OF BREAST — TUBERCULOUS LIPOMA—COLD ABSCESS—LUMBAR AND THORACIC PULMONARY TUBERCULOSIS.

By A. PONCET, M.D.,
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[Specially Reported for this Journal.]

Here is a patient who presents a number of different pathological manifestations, different in appearance, in situation and in kind, yet which display a certain analogy between them in view of the pathological soil, which is particularly interesting in this instance.

This woman, 50 years of age, has for some years past developed various forms of tuberculosis. She is a striking example of the polymorphism of this disease, a point to which we have devoted a good deal of attention, so that it will not cause you surprise.

I will briefly recapitulate her numerous manifestations. Her pathological history dates back some eight years, as shown by a scar in the site of the left breast, which was removed at that date on account of an adenoma within a few months of its making its appearance. Some time after she dedeveloped a subcutaneous lipoma, now the size of a large almond, in the middle third of the left arm. It was then discovered that the patient had albuminuria, though this has long since disappeared after a few months' treatment.

Lastly, some four months since, she complained of lumbar pain, most marked over the spinous processes, followed soon after by the appearance at this spot of local tumefaction, which turned out to be a cold abscess, and subsequently gave issue to a certain quantity of matter leaving a persistent fistula.

A month after this another swelling of the same kind made its appearance at the lower angle of the left scapula, obviously involving the thoracic wall. It is this last swelling, which is tender on pressure, that brings the patient into our wards. It, too, was of the nature of a cold abscess, as shown by puncture, which we followed up by the injection of iodoform emulsion. The puncture gave issue to some serous grumous pus absolutely characteristic of a tuberculous abscess. To complete this brief description, I may add that the patient presents unequivocal signs at the apex of the right lung of a sclerous tuberculous lesion.

This, then, is the brief epitome of an important pathological balance sheet. The patient is pale, emaciated, and earns her living as a charwoman, which, I need scarcely remind you, is a laborious calling.

There do not appear to be any hereditary antecedents. She is married, and her husband, an engineer, is in good health. She has had two children, one son, still alive, and a daughter, who died four months ago of acute meningo-encephalitis, which was, no doubt, tuberculous. We will now discuss the origin of all these manifestations, and enquire whether there is not one common cause for them all, different though their aspect be.

Not so many years ago, before research work on tuberculous articular rheumatism, and especially inflammatory tuberculosis of neoplastic tendencies, such a case would have been a riddle from the point of view of pathogenesis. Although certain of the lesions might have been diagnosed on the strength of their morphological characters to be tuberculous, the others would have baffled any ætiological explanation; indeed, no attempt would probably have been made to provide an explanation. Her case would have been summarised as adenoma of the breast, lipoma, albuminuria of unknown origin, in a woman who subsequently became obviously tuberculous.

Well, nowadays, gentlemen, we can grapple with the case in a much more satisfactory manner; we are in a position to assign the origin of these undetermined accidents, and refer them to one and the same cause, in this instance tubercle infection. It is already seven years ago that I wrote in reference to tuberculous rheumatism: "The rheumatism which we meet with in the tuberculous is not, as a rule, a simple coincidence, an intercurrent attack, and nothing more, a cause of tuberculosis. The rheumatic and tuberculous manifestations have the same pathogenesis, tuberculous intoxication, whence the term tuberculous rheumatism.

At present we can generalise on an even wider scale; indeed, we may state that every lesion, every pathological manifestation, whatever its form and seat, visceral or otherwise, supervening in a tuberculous subject, must, in the absence of any other assignable cause, be attributed to the tuberculous virus.

We go even farther, for clinical experience daily teaches us that tuberculosis may *ab origine* present itself in any organ, in any tissue, in any form, latent or subacute or hyperacute or chronic. It may assume a grave septicæmic aspect, and so be confounded with other infective diseases. Chronic, it often simulates arthritism, neuro-arthritism, etc., thus masking the true nature of the accidents which confront us.

Pray do not run away with the idea that these new doctrinal views are merely theoretical conceptions. On the contrary, they are forced upon us by daily experience of sick persons, by their heredity, their past history, by the absence of any plausible ætiological explanation, by the filiation of the symptoms, the sequence, etc. In many instances this pathogenic diagnosis is confirmed in the laboratory by the aid of bacteriological research.

It is by taking full notes, by scrutinising closely the patients' past history, by keeping them under observation for long periods of time, and by preserving an open mind, that we have arrived at a knowledge of the two main forms of tuberculosis described under the terms *septicæmic* tuberculosis and *inflammatory* tuberculosis.

Septicæmic tuberculosis, the forms of which range from trifling cases of tuberculous intoxication, ambulatory cases, to the most refractory, of variable gravity, sometimes rapidly fatal, but in all cases without any lesional reaction. In the second place inflammatory tuberculosis, which is associated with more or less extensive, grave lesions of ordinary inflammation, in other words, with specific anatomical reactions.

I shall not go more deeply into these two great varieties of tuberculosis, the existence and polymorphism of which are daily confirmed in practice. Nevertheless, it was necessary to recapitulate these considerations in order to explain the case before us.

As a matter of fact, I do not hesitate a minute to state that there is a common infection at the root of these various manifestations. What do we see? To begin with, a benign tumour of the breast, a mammary adenoma. Now this neoplasm, as I have shown in conjunction with Leriche, may, like other neoplasms of the same kind, in the thyroid gland, for instance, be of tuberculous origin. I need not insist upon the proofs that we have brought forward of this bacillary ætiology. Suffice it to state that inflammatory tuberculosis with neoplastic tendencies has been met with by other observers, whether adenomatous, lipomatous, etc., and that, on the other hand, we have collected numerous cases that confirm our views. For example, out of ten cases of mammary adenoma Leriche found that not less than seven were due to tuberculous intoxication.

And now as to the albuminuria from which this patient suffered. In all probability it was of the same origin. For many years I have taught that nephritis coming on spontaneously without any known or plausible ætiology is to be ascribed to tuberculosis, and that the so-called præ-tuberculous nephritis, whether fugitive or chronic, is really tuberculous.

I need not dwell on the cold abscesses starting in bone and the lesions in the right apex to which I have called attention. They are quite typical, and no doubt is possible in respect thereof. Nevertheless, they possess considerable importance in view of the retrospective diagnosis of the previous lesions which did not afford, and could not very well have afforded, histological evidence of their tuberculous nature.

You must not suppose that patients of this kind are rare. We often meet with them in the surgical wards. I might state that such patients encumber the medical wards where, with more or less chronic lesions of the heart vessels, liver, kidney, etc., they are simply labelled cardiopaths, arterio-sclerosis, hepatic, renal, etc. Post-mortem examination in many of these cases reveals the fact that the patients are old-standing tuberculous subjects.

More than ever tuberculosis is the great disease. We must bear it in mind in presence of all spontaneous processes in which no other ætiology can be evoked. For the most part it is not, as generally believed, the terminal disease of a more or less long life, marked here and there by various discomforts and pathological states, consequent upon organic lesions of variable aspect; on the contrary, it is the original cause of all these troubles. It is the bacillary toxi-infection that must be incriminated.

SYPHILIS. (*a*)

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In 1905 Schaudinn and Hoffmann described two spirochætes in exudates from chancres. One large and coarse they named spirochæte refringens; the other thin, fine, and more difficult to see, spirochæte pallida. They considered the latter the parasite of syphilis, and the former a saprophyte. Schaudinn re-named the parasite of syphilis Treponema pallidum: this organism is now generally known as spirochæte pallida.

To demonstrate it, wash the *débris* from the patient's chancre with lint and normal saline, and

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(*a*) Abstract of a paper read before the Aldershot Medical Society.

when the surface is quite clean squeeze out a drop of clear exudate. Pick this up with a clean capillary tube, and transfer it to a microscopic slide; apply a coverslip; place a drop of immersion oil on the under surface of the slide, and make contact with this and the upper surface of the parabolic dark ground condenser, so that total reflection of the oblique rays falling on the slide is prevented, and their focus obtained in the plane of the preparation. On lowering the ⅙ in. objective, and adjusting the mirror, a number of brilliantly illuminated particles are seen against a dark background; cells and spirochætes appear intensely illuminated. Or Burri's Indian ink method may be employed: Sterilise some Gunther-Wagner's ink by steaming, and centrifuge until a film made from the upper portion of the column appears under the 1-12 in. objective quite homogeneous. Mix a loopful of exudate with a loopful of prepared ink, and spread on a slide. Dry the preparation without heat, and apply the oil immersion lens without a coverslip. The S. pallida appears as a white, wavy thread in a dark field. By this method motility is lost. Moreover, the width of the spirochæte varies according to the thickness of the film, and as more or less distortion must necessarily occur in all films, Burri's method is inferior to that of dark ground illumination.

By fixing the film of exudate in absolute alcohol, and staining for five or six hours with Giemsa's preparation, the S. pallida assumes a light rose-pink, and other spirochætes a blue tint.

Prior to Schaudinn's discovery Metchnikoff and Roux had studied experimental syphilis in the chimpanzee, and Uhlenhuth and Thomasczewski had followed the several stages of the disease in testicular syphilis of the rabbit, so that on discovery of the organism pathological and therapeutic research sped apace, with the result that we have acquired more accurate information concerning syphilis in the last half-dozen years than was obtained in all the previous ages of the history of the disease. An invaluable aid in this research has been the application of the Bordet-Gengou reaction to the diagnosis of syphilis by Wassermann, Neisser and Bruck. Bordet and his collaborator in 1901, whilst demonstrating specific antibodies in sera, noticed that when such an antibody was mixed with its antigen and complement *in vitro*, the latter disappeared from the mixture, so that in the case of red blood corpuscles no hæmolysis took place. On the other hand, when the serum did not contain the specific antibody of the antigen the complement did not disappear, and on addition of the hæmolytic amboceptor and corpuscles hæmolysis took place. They found that this prevention of hæmolysis could be turned to account in the demonstration of specific antibodies and antigens. Thus, if B. typhosus in the presence of an unknown serum could divert complement from a hæmolytic system, the serum must contain typhoid antibodies; and, conversely, if an unknown bacillus mixed with a typhoid serum caused diversion of the complement, the bacillus must be B. typhosus.

Wassermann and his colleagues in 1905 extended the work of Bordet and Gengou by showing that extracts of bacteria could be substituted for the corresponding bacteria without altering in any way the results. In 1906 they described syphilitic antibodies in the serum of syphilised apes, and in the sera and cerebro-spinal fluids of syphilitic men. They used as antigen an extract of the liver of a congenital syphilitic fœtus. In the following year Levaditi and Marie showed that an extract of the liver of a normal fœtus performed the functions of antigen, so that some constituent of the antigen other than the spirochæte is obviously the active agent in the Wassermann reaction. The Wassermann body is, therefore, not a specific immune substance destructive to spirochætes. Whilst Wassermann and his collaborators hold to the antigen-antibody theory, a large number of workers have shown that lecithin and other lipoids act as efficient antigens; so that whilst it is convenient to speak of the extract as antigen, it must be remembered that the syphilitic action is not due to an antibody to the spirochæte pallida acting in conjunction with its own receptors. When a watery extract of syphilitic tissue rich in spirochætes is used, it is highly probable that there is a reaction between spirochæte receptors and specific antibodies in the patient's serum; the fact of greatest importance, however, is that a syphilitic serum has acquired the power of reacting with certain bodies of known constitution so as to fix or "deviate" complement.

Julius Citron and others have sought to explain the reaction by assuming that the spirochæte forms a toxolipoid with lecithin in the cells of the body. This toxolipoid is analogous to Ehrlich's toxin, possessing a toxophore (spirochæte) group, and a haptophore (lecithin) group, and can give rise to antibodies in the serum. Thus, when an extract of syphilitic liver containing toxolipoid is mixed *in vitro* with syphilitic serum containing antibody and complement, the latter is fixed. In the case of the normal organ extract containing the lipoid or haptophore group only, complement is also fixed as antitoxin is neutralised by Ehrlich's toxoid. That such antibodies, if produced, can have no destructive action on the spirochæte, and cannot produce immunity, is shown by the following facts: S. pallida mixed *in vitro* with complement and antiserum retains its infective properties; a chimpanzee injected with antiserum is still inoculable with syphilis; a chimpanzee injected with extract of syphilic liver rich in spirochætes is still inoculable with S. pallida; primary syphilis cured with salvarsan does not result in the Wassermann reaction becoming strongly positive; the Wassermann substance is destroyed by temperatures much below those which kill true antibodies; it fixes complement at 0° C, a temperature at which no true antibody has been known to fix it; it is retained by a filter which allows true antibodies to pass. It appears from recent work that an addition of cholesterin to lecithin increases the amount of complement absorbed in presence of syphilitic serum, but not in the presence of normal serum: these two bodies acting together in emulsion form a delicate test for the detection of syphilitic sera.

In performing the Wassermann test the following reagents are required: (1) serum to be tested, (2) antigen, (3) complement, (4) hæmolytic system, which acts as an indicator, and which consists of hæmolytic amboceptor and blood corpuscles, (5) 0.85 per cent. NaCl solution.

1. The serum to be tested is prepared from blood drawn from the patient's ear or elsewhere into a Wright's blood capsule of capacity 1 to 2 c.c. The capsule is centrifuged, and the serum removed by pipette, and inactivated by immersion in a water bath for half an hour at 55° C. The serum thus prepared may be kept in an ice chest for several days. Experience has shown that about 0.05 to 0.1 c.c. of serum is a convenient quantity to work with.

If cerebro-spinal fluid is to be tested the patient is placed on his side with his knees drawn up, so that the lumbar concavity is caused to disappear. A hollow steel needle three inches long is inserted in the middle line slightly below that spinous process which is on a level with the iliac crest, and is directed very slightly upwards firmly and slowly till the canal is reached. Should the needle become blocked it is cleared with a stilette. Twenty to thirty c.c. of fluid may be withdrawn; no blood should be seen. The fluid is centrifuged, but not heated, as it does not contain hæmolytic complement. About 0.25 to 0.5 c.c. is used for the test.

2. The antigen first used by Wassermann was an aqueous extract of liver of a syphilitic fœtus. Owing to the unstable properties of the preparation the aqueous extract soon gave place to an alcoholic extract. Alcoholic extracts of various organs are now used with complete success. In using such extracts one must not lose sight of the hæmolytic action which it exerts by itself, of its anti-complement action, and of its power of absorbing complement in the presence of syphilitic serum : all these fallacies must be controlled.

3. The complement consists of the fresh serum of a guinea-pig, and is best used 18-24 hours after drawing the blood from the animal. In the interval it should be kept in the ice chest.

4. The hæmolytic amboceptor is obtained by inoculating a rabbit with sheep's red blood cells which have been thoroughly washed several times in 0.85 per cent. NaCl solution. When a high titre has been produced the animal is bled, and the blood placed on ice until the serum separates. It is then inactivated and sealed in capsules for use.

The corpuscles are prepared from fresh sheep's blood by centrifuging and washing thoroughly in a large volume of normal saline. The deposited corpuscles are finally made into a 5 per cent. suspension with normal saline, and of this half a c.c. is used in the test.

5. Recrystallised NaCl and distilled water are used to make a normal saline (0.85 per cent.). Syphilitic serum possesses in a greatly increased degree the power of fixing complement in the presence of certain lipoids—glycocholates, soaps, and lecithin prepared from liver and heart tissues. Cholesterin, as noted above, when added to lecithin, appears to act specifically in increasing the quantity of complement absorbed. Heating to 55 deg. C. for half an hour deprives all sera except syphilitic of the power of complement-fixation. There is some evidence to show that the reacting property of syphilitic serum is associated with its globulin content.

Whilst positive reactions have been obtained in frambœsia (S. pertenuis), relapsing fever, trypanosome infections, malaria, leprosy and other maladies, it appears that so far as diseases common to this country are concerned, the change in the serum which produces a positive Wassermann reaction is peculiar to syphilis, and fully 90 per cent. of cases in which active syphilitic lesions exist give the reaction. Whilst a negative reaction, even when carefully elicited, does not definitely exclude syphilis, experience has shown that it is most unlikely that a negative reaction will be obtained repeatedly where active syphilitic lesions are present. The Wassermann reaction has been of the greatest service in demonstrating the true syphilitic character of the so-called parasyphilitic affections. Neisser has conclusively shown that "immunity" to syphilis, as presented in parasyphilitics and the women of the "law of Colles," is due to the presence of living spirochætes. The fact that more than half the cases of latent syphilis react positively is of the greatest moment, as infectivity may exist over a very long latent period.

The Wassermann reaction is a measure of the power of a serum and antigen to fix complement : it is, therefore, necessary to standardise all the reagents. Since the strength of the hæmolytic amboceptor, when once estimated, does not appreciably vary, it is convenient to take it as the constant.

Hæmolytic system : A series of dilutions of amboceptor serum in saline is prepared, and into each tube is measured a definite quantity of complement (say, .1 c.c. of a 1 in 4 dilution), and half a c.c. of a 5 per cent. suspension of sheep's corpuscles, and the whole is put in a 37 deg. C. incubator for half an hour. That tube is selected as containing the minimal hæmolytic dose or unit in which the smallest quantity of amboceptor has produced complete hæmolysis. In the test some experimenters use five times and others two-and-a-half times this unit. In the same manner a series of dilutions of complement serum is prepared, and half a c.c. of 5 per cent. suspension of corpuscles sensitised with, say, 2½ units of amboceptor is added to each tube, and the whole incubated for half an hour. The minimal hæmolytic dose is then observed, and 2½ times this unit is used in the test.

Antigen : As in the case of the amboceptor and complement sera quantities of saline are placed in a series of tubes, so that on the subsequent addition of antigen the volumes are equal. Convenient quantities of alcoholic heart extract may run between 0.05 and 0.15 c.c. The antigen is pipetted on the surface of the saline, and the two fluids rapidly shaken together. Complement is then added, and the mixture again shaken and incubated for half an hour. Lastly, 2½ units of amboceptor and half a c.c. of 5 per cent. suspension of corpuscles are added and incubated for a quarter of an hour. The smallest amount of antigen is observed which, by absorbing complement, completely inhibits hæmolysis. Half this quantity produces complete hæmolysis, and is convenient for the test.

In executing the test two test-tubes are used for the serum under observation—two for a normal control serum, and three for *technique* controls.

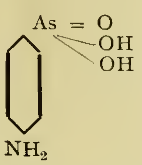
The saline and antigen are shaken immediately the latter is added. On addition of complement the tubes are again shaken and incubated for half an hour at 37° C. The corpuscles are then added, the tubes again shaken and incubated for a quarter of an hour. Lastly, the tubes are placed on ice, allowed to deposit for two hours, and results observed. If hæmolysis occurs in tube 1, the reaction is negative. If no hæmolysis occurs in tube 1, the reaction is positive. Complete hæmolysis occurs in tubes 2, 3, 4, 5 and 6. No hæmolysis appears in 7, demonstrating that the corpuscles have been washed free from complement, and that they do not lake spontaneously.

Tube 2 shows that the patient's serum alone does not prevent hæmolysis; tube 3, that normal serum mixed with antigen does not inhibit hæmolysis; tube 4, that normal serum alone does not prevent hæmolysis; tube 5, that antigen alone does not inhibit hæmolysis; and tube 6, that the amounts of complement and sensitising amboceptor are sufficient to produce rapid and complete hæmolysis.

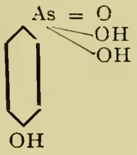
In this as in many other biological reactions it is difficult to state at all times whether a particular degree of inhibition of hæmolysis warrants the diagnosis of a positive reaction. In sera examined for the first time it is well to return as positive only those that give definite results; in sera previously found to be positive slight inhibition of hæmolysis (more especially if the patient be under treatment) may still be returned as positive.

In using antigens composed of alcoholic extracts of organs the emulsion of saline and antigen should be made so as to procure the maximum turbidity, since a turbid emulsion adsorbs more complement. As alcohol, when mixed in sufficient quantity with saline solution, can destroy complement, it is necessary to attend carefully to the quantity used in the preparation of antigens, and also to the standardisation before use of all such antigens in the presence of both normal and syphilitic sera. In this connection it has been found that liver lecithin and cholesterin form an efficient substitute for alcoholic organ-extracts.

Never, perhaps, in the history of biological science has fruitful research progressed so rapidly as in experimental syphilis during the last six years. The discovery of the spirochæte by Schaudinn in the primary sore was followed almost immediately by the Wassermann reaction which detects it in the most distant and inaccessible tissue, and hard upon these came Ehrlich's chemo-therapeutic agent, dioxy - diamido - arsenobenzol, which kills the organism. The experimental work done in animals by Ehrlich and Hata on relapsing fever, fowl spirillosis, and syphilis in rabbits, had brought to light three classes of chemical compounds more or less curative in trypanosomiasis and spirillosis before they commenced their research on the chemotherapy of syphilis in man—viz., compounds of arsenic, such as atoxyl, arsacetin, arseno-phenylglycin; benzidin azo dyes, such as trypan blue, trypan red, trypan violet; and triphenyl methane dyes, such as methyl violet and fuchsin. Of these the arsenical compounds gave the best results. According to Ehrlich's account of the work, the starting point was atoxyl, which was shown by Bertheim not to be an anilido derivative of arsenic acid, as had been previously stated, but the sodium salt of para-amido-phenyl-arsenic acid

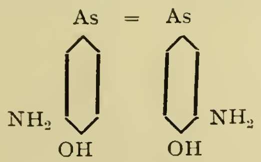


By diazotising para-amido phenylarsenic acid Bertheim obtained para-oxyphenylarsenic acid,



which body can also be obtained by acting on phenol with arsenic acid.

By nitrating and afterwards reducing para-oxyphenylarsenic acid he obtained the dioxydiamino body as a condensation of two molecules.



The di-hydrochloride of this compound is the salvarsan of commerce. Bertheim believes that the para position of the OH group is correlated with the spirillicidal action of the compound. The NH_2 group in orthoposition to OH was found to largely increase the therapeutic efficiency. The spirillicidal efficiency is also increased by the pentavalent arsenic in para-oxyphenylarsenic acid becoming trivalent in dioxydiamido-arseno-benzol.

The drug must be rigidly shut off from the atmosphere and prepared for injection immediately before use, otherwise it oxidises to poisonous compounds. It dissolves in water or dilute saline, producing a strongly acid solution. In the early days this irritating and toxic solution was injected intra-muscularly and intra-venously with bad results. A mono-acid solution—*i.e.*, the solution obtained by adding half the amount of alkali necessary to produce complete neutralisation—is also irritating and toxic.

The neutral suspension obtained by the addition of just sufficient alkali to produce neutrality has been used by Wechselmann and others, but in many cases pain was marked and absorption slow.

The alkaline disodium salt used by Hata in his early experiments is the best form for use. The full dose (0.6 gramme) of salvarsan is dissolved in 15 c.c. normal warm saline in a sterile mortar; ten per cent. NaOH is slowly added, drop by drop, whilst the precipitate which forms is rapidly ground with the pestle. A single drop more of NaOH than is necessary to dissolve the precipitate (about 1.5 c.c. in all) is used, otherwise on cooling a trace of precipitate may fall out. The dose is thus brought into solution in a volume of 15-20 c.c., a convenient volume for intra-muscular injection. For intra-venous injection, which is now most used, the 15-20 c.c. are diluted to 300 c.c. with warm normal saline. It is important that the patient's alimentary tract be in good condition, and that he receive the injection in bed. Transitory symptoms occasionally occur, such as nausea, slight rigor, rise of temperature to about 101 deg. F. or 102 deg. F., but the injection, as a rule, is followed by a sense of well-being. The arsenic is excreted partly by the urine and partly by the fæces, in cases of intra-venous injection for three or four days, and in cases of intra-muscular injection for several weeks.

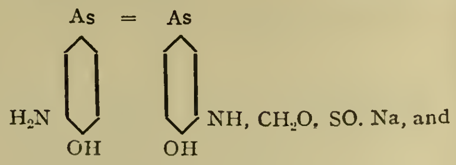
It is still too early to speak of the permanent effects of the drug, much less to make claims for its powers of complete cure. But the curing of lesions in primary and secondary syphilis is frequently marvellous, extensive chancres heal in a day or two; large mucous patches vanish in 24 hours; condylomata, macular and pustular syphilides, and ulcers, which were quite refractory to mercury, disappear in a few days. The literature already records some thousands of cases of the most rapid cure of ulcerating malignant forms of syphilis.

Wechselmann has obtained equally good results in tertiary conditions in viscera, testicular and laryngeal gummata, syphilitic epilepsy and gummata of the brain. From the treatment of more than 1,500 cases he is convinced of the great superiority of salvarsan over mercury. His results in tabes and general paralysis are not so remarkable; the permanent damage already done cannot be repaired. Michaelis and his collaborators have had excellent success in treating congenital syphilis in infants, working for the most part with doses of 0.05 gramme salvarsan.

Perhaps the most important evidence in favour of the view that salvarsan produces complete sterilisation is the recurrence in treated cases of re-infection with syphilis. Apart from what has already been done by Ehrlich and Bertheim's synthetic drug, the unbounded hope of possibilities in therapeutics for similar syntheses stamps this research as one of the most important pieces of scientific work of modern times. It has opened the door to the manufacture of synthetic disinfectants. Along similar lines Morgenroth has been able to cure with such a synthesised drug 50 per cent. of pneumococcal septicæmias in mice; and Wassermann has recently published an account of the action of his compound synthesised from selenium and eosin on experimental cancer in mice.

A modification of salvarsan, neosalvarsan, has recently appeared, and bids fair to oust the original body. The preparation is obtained by introducing a sulphoxyl radicle through the agency of acid sodium formaldehyde sulphoxylate CH_2 (OH) O.SO.Na.

One such group is attached to an amido-radicle with elimination of water, thus



forms a yellow powder less fine than salvarsan. A dose of .9 gramme is said to be borne as well as .6 gramme salvarsan. It also readily oxidises into a highly toxic compound, turning in colour from orange yellow to yellow ochre. The above dose dissolves readily in 150 c.c. distilled water at 30 deg. C., forming a clear solution ready for venous injection. There is no doubt that the outlook for chemo-therapy is bright.

A CASE OF ACUTE PERFORATION OF THE STOMACH;

WITH AN ANALYSIS OF CERTAIN PREDOMINANT SYMPTOMS. *(a)*

By JOHN H. WATSON, M.B., B.S.LOND., F.R.C.S.ENG.
Burnley.

IT is now common surgical knowledge that perforations of gastric ulcers are a frequent cause of acute abdominal suffering—ending sooner or later in death in most instances, unless relief is obtained by timely surgical assistance.

We are also aware that ulcers on the anterior wall are much more liable to perforate than those on the posterior; moreover, we know that the leakage of gastric contents following such a rupture is more prone to diffusion in the anterior lesion, hence they are more perilous to life. We cannot, however, with certainty differentiate between anterior and posterior perforations, nor is it necessary to do so, but we do realise the absolute importance of an early diagnosis and immediate operation. Practically, the life of such a patient depends upon the diagnostic acumen of the medical man who is first called in attendance. There can be no more critical time either for patient or doctor. The doctor who hesitates and spends time in repeated examinations or defers many hours for the arrival of the specialist, gravely endangers his patient's life, and may easily forfeit it. Late operations show a very heavy mortality, and no wonder the surgeon grumbles.

That there is room for hesitancy and doubt in such a crisis one is obliged to admit, and we may exonerate ourselves in case of mistaken diagnosis by quoting some positive statements of symptoms from one or other surgical work which certainly were not evident in our own patient.

The accounts we are accustomed to of acute abdominal disease are by no means infallible, very often a more or less disorderly collection of symptoms with no regard to their relative importance, and sometimes even tending to lead one astray. For this reason I have recorded this case in detail and attempted to analyse it from Mackenzie's point of view, namely, that in visceral disease "the most important class of symptoms arise from the involvement of the nervous system—when a stimulus arising in some viscus passes into the central nervous system, and there acts on the nerves supplying other organs, exciting the function peculiar to them."

The patient, G. H. F., was a male æt. 58 years, and occupied as an itinerant dentist.

History of present illness.—On the night of November 15th, 1910, he had supper at about 10 o'clock, consisting of a basin of bread and milk, and shortly after went to bed feeling quite well, but about 11 o'clock he awoke with most violent pain in the pit of his stomach. With the assistance of his wife he got up and was able to go downstairs into the kitchen and rest on the couch. Dr. Clegg, of Rosegrove, was sent for, and found him suffering from such intense pain than an opiate was given but with practically no relief. I saw him with Dr. Clegg, 12.15 a.m.; he was still on the couch, lying on his back in a semi-recumbent posture. His face appeared pinched and pale, beads of perspiration stood out on his brow, and his skin felt cold and clammy; he had vomited, and was still retching a great deal and seemed exhausted from the effort. He answered our questions quite well, but in a whispering voice, and was evidently disinclined to talk except to plead for something to ease the pain. Both he and his friends declared that he went to bed perfectly well. On examination: a spare man of poor muscular development. Pulse 68, regular and a good forcible beat. Respiration 24, shallow and thoracic entirely. Temperature 98.4. Abdomen motionless, supra-umbilical region tender and board-like; over this part the patient could not bear percussion, and the area to the right and just below the costal margin was so exquisitely sensitive that the slightest pressure caused him to shout. There were also periodic exacerbations of the pain. Knee reflexes were present. No evidence of plumbism. Our diagnosis lay between perforated ulcer of stomach or of the duodenum; but we felt some uncertainty still chiefly on account of the excellent condition of his pulse. As the relatives were anxious to consult before permitting his removal to hospital, we determined to see him again in about an hour's time.

When seen at 2 a.m. he was certainly not so well, pulse rate increasing 84, respiration still quick, and pain constant. His removal to hospital was agreed to, but owing to delay in transport he did not reach the Victoria Hospital, Burnley—about four miles away—until about 5 a.m. His pulse was, on admission, 100, respiration 30, temperature 97. Operation at 5.45. Anæsthetic—chloroform followed by ether. An incision was made slightly to the right of the mid-line through rectus from ensiform to umbilicus. On opening the peritoneum there was an escape of gas and then of turbid fluid. The anterior wall of stomach was first explored, secondly the duodenum, and at once from the right kidney pouch a quantity of semi-purulent fluid curd and food débris welled up. This was rapidly mopped up, but no perforation seen; a finger inserted through foramen of Winslow immediately came upon a thickened area with a central perforation. The transverse colon was turned out, the gastro-colic omentum split, and the perforation exposed; it was observed to be situated near the lesser curvature and close to the pylorus, about ¼ inch in diameter, cleanly punched out, and in the centre of an indurated area, about the size of half a crown. The hole was closed with two through-and-through catgut sutures, extra strain being avoided owing to the friability of the neighbouring tissues, and a superimposed layer of four fine silk lembert sutures inserted, a small graft was turned back from the adjacent posterior layer of the lesser omentum and fixed in position over this area with catgut.

The upper abdomen was then well flushed with saline and about two pints left behind. The abdominal wall was closed with silkworm gut in haste and without anæsthetic as the pulse became imperceptible. The operation took about three-quarters of an hour. For the first day his recovery was doubtful, he rallied on the second day, afterwards making an uneventful recovery. He left hospital in three weeks, and has been up to the present time perfectly well.

In presenting this case, the special features I have attempted to analyse and explain are:—

I.—The site and nature of the pain.
II.—The board-like rigidity of the upper abdomen.
III.—The condition of the pulse.

I. The site of the pain in this case the patient indicated with the palm of his hand, and is shown in the diagram (fig. 1) as the deeply stippled area, situated in the epigastrium to the right of the mid-line, corresponding anatomically to the distribution of the anterior terminal cutaneous branches of the 7th dorsal nerve particularly; in fact, so great was the sensitiveness over this area that the slightest touch made him shout. In addition, there was general tenderness over the upper abdomen corresponding to

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(a) "Liverpool Medico-Chirurgical Journal," January, 1912.

the distribution of the 6th, 7th and 8th thoracic segments, and this was noted to be more marked to the right of the mid-line (*vide* fig. 1).

Dieulafoy, quoted by Lejars, refers to this acute intense pain, which he describes as atrocious, and localises it at the onset in the sub-hepatico-gastric region above and to the right of the umbilicus.

Now, as to the nature of the pain, both Mackenzie and Lennander maintain that the viscera are insensitive to pain. Lennander states from his observation that the parietal peritoneum is very sensitive to pain, and also that the parietal peritoneum about the foramen of Winslow, and the lower opening of the thorax along the cortal cartilages, is especially sensitive. Ramstrom, in corroboration, has demonstrated an exceedingly intricate plexus of nerve fibrils and endings in the parietal subserosa derived from those nerves supplying the adjacent parietal muscles. Lennander therefore believed that the visceral pain is the result of an inflammation involving the parietal peritoneum either by contiguity, the spread of toxins, or the inflammatory process along the subserosa; and in hollow muscular viscera, as the stomach, is the effect of muscular spasm exerting traction on the subserous tissue and indirectly on the cerebro-spinal nerves of the abdominal wall.

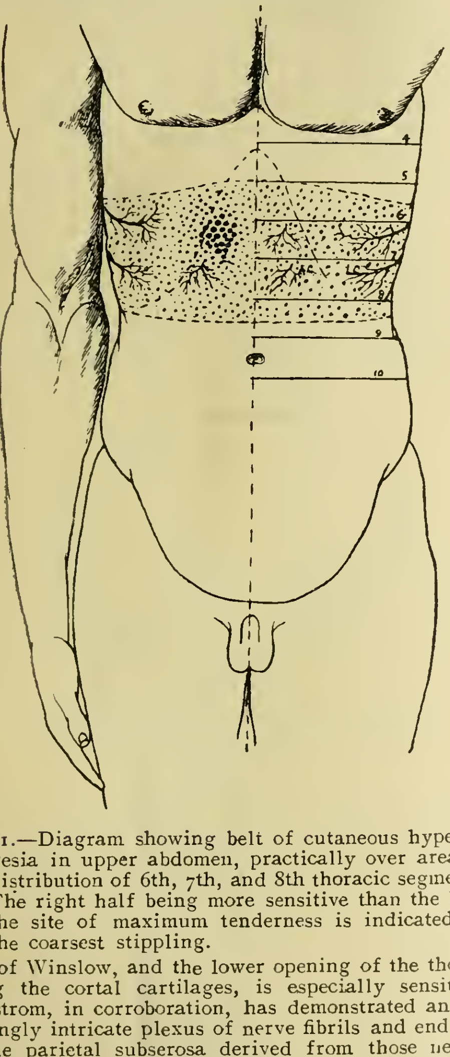

Fig. 1.—Diagram showing belt of cutaneous hyperalgesia in upper abdomen, practically over area of distribution of 6th, 7th, and 8th thoracic segments. The right half being more sensitive than the left, the site of maximum tenderness is indicated by the coarsest stippling.

Mackenzie puts forward the view that the pains arising from a viscus are not felt in the organ, but are referred to the peripheral distribution of the cerebro-spinal nerves in the external body wall. He assumes that if a sensory nerve be stimulated in any part of its course through the brain, spinal cord, or trunk of the nerve, the resultant sensation is referred to the peripheral distribution of the nerve in the external body wall; so that if a morbid process in a viscus gives rise to an increased stimulus of the nerves passing from the viscus to the spinal cord, this increased stimulation affects neighbouring centres, and so stimulates sensory, motor, and other nerves that issue from this part of the cord, and thus an irritable focus is produced, and consequently such stimulation of a sensory nerve in the focus will result in pain referred to the end organs of that nerve, so that visceral pain is really a viscero-sensory reflex. In his book on *Symptoms and their Interpretation* he gives clinical evidence in support of his assertion that the most severe pain of which we are conscious can be produced by the violent contraction of hollow muscular organs, and that this pain is not felt actually in the viscus, but is referred to the sensory nerves in the external body wall arising from those segments of the spinal cord supplying also the contracting viscus.

Hertz, in his Goulstonian Lectures (1911), concludes that there is such a thing as true visceral pain, the cause being tension upon the muscular coat of the hollow organs. He says, in the case of the stomach, that abnormally strong peristalsis causes an excessive rise in the internal pressure in the pyloric end of the stomach, and the tension on its muscular fibres gives rise to pain. This hardly explains the cases I have seen in which a pyloric ulcer had perforated. The tension in such a case should be lessened, for there is a free exit for stomach contents into the peritoneum, and yet the pain is intolerable.

To my mind, Mackenzie's viscero-sensory reflex gives us the best working hypothesis as to the nature of the pain. The onset is far too quick—the patient is struck almost as if he had been shot with a gun—to accept Lennander's irritation or spread of inflammation theory, which would take some time.

We may now revert to a question difficult of explanation, namely, why should the superficial tenderness be so much more marked on the right side. I see no reason that we may not assume that the efferent visceral nerves from this particular damaged portion of the posterior wall of the pyloric end of the stomach are connected with the right half of the spinal cord in the region of the 7th dorsal segment particularly. We are, of course, aware that the anterior surface of the stomach is supplied by the left vagus and the posterior by the right vagus, and on anatomical and embryological grounds it is conceivable that a similar distribution might be the case with the sympathetic; although so far as I know it has not been demonstrated. If such were the case, an explanation would be apparent; but even without this, if we accept Mackenzie's theory of an irritable focus confined to one or more segments of the spinal cord, it does not require a great stretch of the imagination to comprehend that if the right half of the segment is receiving more intense stimuli than the left, the right half will become more irritable and the viscero-sensory reflex of that side stimulated to a higher and consequently more sensitive degree; and this is what we should expect on physiological and histological grounds.

The following diagram (fig. 2) will, I hope, serve to make the idea clearer.

II. The muscular rigidity was most noticeable about the upper halves of recti abdominis. It is common anatomical knowledge that these muscles above the umbilicus receive their nerves from the 5th to the 9th thoracic segments, and the overlying skin is supplied by terminal branches of these nerves, which traverse the muscle and, after supplying it, pierce the anterior sheath somewhere midway between the linea semilunaris and the linea alba.

These nerves also supply the respective intercostal muscles and the upper two or three digital origins of the obliques and transversalis abdominis. Now on the deep surface of these flat abdominal muscles we have the subperitoneal tissue, which, as previously stated, contains an extraordinarily intricate development of nerve fibrillæ and their endings, derived from those nerves supplying the superjacent flat muscles of the abdominal wall. (Ramstrom.)

So that practically from any one of these segments of the spinal cord, we have corresponding segmental supply of muscle, skin, and subserosa. The visceral nerves of the stomach are also derived from these mid-thoracic segments, and in our damaged viscus the in-

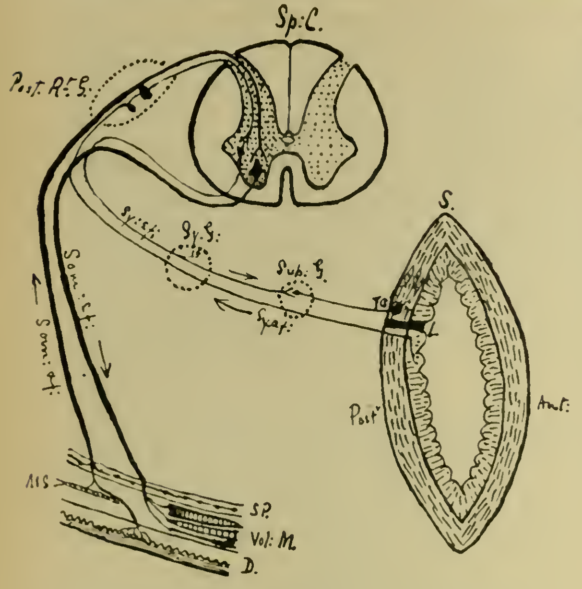

FIG. 2.—Diagram to illustrate the concept of a viscero-sensory and viscero-motor reflex.

Stimuli from the lesion (*L.*), in the posterior wall of the stomach (*S.*), pass by the splanchnic nerve (*Sy.af.*), reach the right half of the spinal cord (*Sp.C.*), and there give rise to an irritable focus in the cord, which is most intense in the right-half segment, and is indicated by coarser stippling. The neighbouring cells and centres are stimulated to activity, viz., (*a*) an efferent sympathetic fibre (*Sy.ef.*), having its origin in this area, conducts impulses to the muscular wall of the viscus (*S.*); (*b*) motor impulses to the voluntary muscles of the abdominal wall supplied by this segment, *via* the efferent somatic nerves (*Som. ef.*) = viscero-motor reflex; (*c*) sensory impressions are referred by the afferent somatic nerves belonging to the segment to (1) the skin (*D.*), resulting in cutaneous hyperalgesia, (2) the subperitoneal tissues (*S.P.*) = increased sensitiveness, (3) the muscles (*Vol. M.*) = muscular hyperalgesia; the general effect = viscero-sensory reflex.

(The thick lines indicate the path of impulses to external body wall; the fine lines the path of visceral or sympathetic impulses.)

tensity of the afferent impulses to the mid-dorsal cord are sufficient to bring about an irritable focus (Mackenzie); this increased stimulation again excites neighbouring nerve-cell groups, and consequently the anterior horn cells of the segments involved respond, and we get an immediate almost tetanic contraction of the muscles innervated from this area. As a result, we observed the board-like rigidity of the upper abdomen, the fixity of the lower chest, and secondarily the more rapid compensatory breathing of the upper thoracic type.

In Mackenzie's own words we have, "the contraction of voluntary muscles in the external body wall in response to a stimulus arising from a viscus," and this phenomenon he terms a viscero-motor reflex.

III. We now come to the condition of the pulse, which was found to be 68 and of excellent tension—with our diagnosis of a perforation, a condition of pulse not to be expected if we are guided by the textbooks. One recent writer goes so far as to say that a normal pulse practically excludes all cases of ruptured viscera; however, Moynihan, in a most able article on the "Acute Emergencies of Abdominal Disease," says the pulse will be found at the first to be hardly altered in frequency or in volume, and quotes a case in consultation in which he deliberately postponed operation for some hours. I know of two other similar cases which unfortunately ended in disaster simply because the pulse was normal and therefore the aptly termed "mythical shock," the sign or symptom-complex for which we are instructed to look out above all others in an abdominal catastrophe of this nature, was not present, and I believe that to most practitioners the essential feature of this so-called shock is a rapid feeble pulse, hence the frequency of late diagnosis and consequent disasters.

Crile and Mummery both maintain that the essential phenomenon of the state designated surgical shock is an abnormally low blood-pressure. Unfortunately I had no manometer for an observation on my patient, but I am confident there was no diminished blood-pressure, but rather the reverse; therefore there was no shock to begin with, and this bears out what I want to suggest: first, that the efferent fibres conveying impulses from the stomach to the mid-dorsal cord excite the subsidiary vasomotor centres in that area, and thus bring about what may be called a viscero-vasomotor reflex. This soon becomes general, for we have in addition the intense stimulation of the afferent sensory nerves of the upper abdomen as previously stated. These on their way up to the brain (see diagram, fig. 3) will excite the vasomotor centre in the medulla, and consequently the primary effect anticipated would be a rise in the blood-pressure. This persistent and ever-increasing excitation from the spread of peritoneal irritation as a consequence of leakage from the stomach can only end sooner or later in exhaustion, the result of which is, of course, loss of tone of the vessels and consequent dilatation.

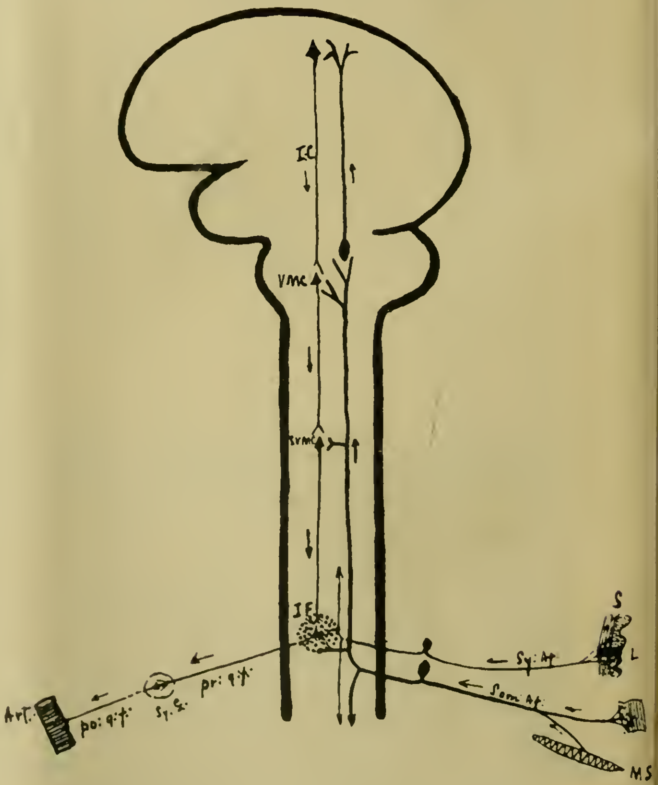

FIG. 3.—Diagram to illustrate the concept of a viscero-vasomotor reflex.

Stimuli from lesion (*L.*) in stomach walls (*S.*) pass by splanchnic afferent nerve (*Sy. af.*) to spinal cord, and are of sufficient intensity to cause an irritable focus at *IF.*, from whence proceed vasomotor impulses to blood-vessels (*Art.*), *via* pre- and post-ganglionic sympathetic fibres (*po.* and *pr. g.f.*); in addition somatic afferent fibres are stimulated in the same area (*Som. af.*), and, in their passage up to the cerebrum, stimulate also the subsidiary (*S.V.M.C.*), and the principal vasomotor centres (*V.M.C.*). *Sk.* = skin; *M.S.* = muscle spindle; *I.C.* = intercentral fibre.

There is yet another factor which may be considered as tending to bring about early vaso dilatation.

It has been shown that stimulation of the nerves distributed to the muscles, or even the muscles themselves, causes a depressor effect upon the blood-pressure, thus proving the presence of afferent fibres in the muscles. It is therefore conceivable that the extreme contraction of the recti and the other abdominal muscles stimulates the muscle spindles they contain (which are stated to be the end organs of the afferent nerve fibres in muscles (Sherrington), and so accelerate the onset of vaso dilatation.

The question now arises, why should the blood stagnate in the abdominal veins. Malcolm has suggested that the superficial vessels are first constricted, and, if the exciting cause is kept up, the large vessels contract and the blood is driven into the tissues and back into the abdominal veins. Looking at the question from the point of view of a viscero-vasomotor reflex, afferent vasomotor impulses from the stomach excite the subsidiary vasomotor centres in the mid-dorsal cord, and pressor impulses are referred *via* the splanchnics and cœliac ganglion, thence to the visceral blood-vessels; and as the lesion is in the stomach, it may be assumed these subsidiary centres will be the first to be excited, and will also be the first to tire, consequently the blood will tend to dilate these toneless vessels first. Other physical factors, such as the lessened aspiratory influence of the thorax, and the total absence of abdominal movement, will of course increase the stagnation, and hence we get more or less rapid bleeding into the splanchnic vessels.

The rapid action of the heart which now takes place is a natural physiological sequence consequent upon the great reduction in the actual work done by each beat, because the heart is receiving less blood and also the quantity propelled at each beat is diminished. Moreover, there is an alteration in the quality of the blood it receives, the viscosity being lessened. And lastly, there follows the greatly diminished peripheral resistance accompanied by a fall in the blood-pressure, and these are the concomitant factors which are synonymous with the surgical nightmare called shock.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Case of Empyema.—Mr. Willmott Evans operated on a case of empyema. The patient was a woman, æt. 35, who had had an attack of pneumonia a fortnight before, but just after the crisis the temperature rose again, and ever since she had had an irregular temperature, pain in the right side, and a troublesome cough. On examination, there was dulness of the right side reaching upwards from the liver dulness to the upper border of the fourth rib. There was absence of vocal resonance and of vocal fremitus, and by measurement the right side of the chest was two inches more than the left; the cough was troublesome; there was very little expectoration. The patient was unable to lie down in bed at night, the breathing was quickened, the pulse 120, and the temperature of a hectic type. A diagnosis of empyema was made and operation decided on. A needle was inserted into the eighth intercostal space and pus found.

An incision was made on the right side just in front of the posterior axillary line, about two inches in length, over the eighth rib. The tissues were turned back from the rib and the periosteum stripped up for a length of about one inch. Then, with a pair of rib forceps, an inch of rib was removed. An incision was then made through the space, the pleura was opened, and creamy pus came away; in all about two pints were evacuated, and then a drainage tube was inserted, which consisted of two rubber flanges connected by a piece of rubber tubing about an inch in length, so that one flange rested on the skin and the other was just within the pleural cavity. No attempt was made to wash out the cavity. Gauze dressings were applied and the patient returned to bed.

Mr. Evans said that the diagnosis in this case was clear, for an acute attack of pneumonia was followed almost immediately by the signs of pleural effusion, and at the same time the irregular temperature pointed to the presence of pus, but in all cases it is advisable before operating for empyema to confirm the presence of pus by an exploring syringe at the site where the incision is about to be made. As to the nature of the empyema, he pointed out that there can practically be no doubt that it will prove to be pneumococcal in nature. With regard to the site of the incision, it is, he thought, desirable to place it in that position which will be best for drainage, and as it would be necessary for the patient to remain in bed the drainage opening must be towards the back of the thorax; yet, if it be placed too far behind, the opening will be closed when the patient is in the recumbent position, and this will interfere with drainage; therefore the most convenient position is immediately in front of the posterior axillary line. The question of the level at which the opening should be made is also, he considered, important: if it be made too high up the empyema will not drain well, while if it be made too low down, the rising of the diaphragm, which always occurs as the chest wall falls in, will block the opening before the empyema has healed; therefore the level of the eighth rib is about the most suitable site. Again, the question has to be considered whether it is necessary or not to resect a portion of the rib; it cannot be said to be essential in all cases, for many patients recover after a simple incision, and especially is this the case with children; but, on the other hand, the falling in of the chest wall brings the ribs closer together, and this may lead to nipping of the tube, so that on the whole in adults it is better to resect a portion of the rib. It is sometimes recommended, he remarked, that the pleural cavity should be washed out with an antiseptic solution, especially if the pus has been fœtid. In a certain number of cases immediate death has followed the practice of washing out the pleura, and although it is difficult to speak with certainty as to the cause of this, it is probably due to the shock produced by the use of too cold or too irritating a solution; moreover it is not necessary, for however fœtid the pus may be at the time of incision of the empyema, it will become perfectly sweet within two or three days. The use of a drainage tube, Mr. Evans considered, was important, but it is undesirable to employ a long tube such as is often used, for it does not hasten the closing of the cavity—in fact, it may retard it. All that is needed is that the inner opening of the tube should reach to the pleural cavity. The prognosis of this case, Mr. Evans said, was good because it was almost certainly pneumococcal in origin, for pneumococcal empyema had a much better prognosis than other forms of the disease.

The patient recovered rapidly. At the end of a week pus ceased to be discharged; the tube was removed a day or two later, and at the end of a fortnight the woman was able to go to a convalescent home with the wound almost healed.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Sept. 21st, 1912.

At the Gesellschaft für Psychiatrie and Nervenkrankheten, Hr. Bonhoefer showed a boy, æt. 9, who presented the symptoms of

Cerebello-bulbar Paralysis.

When the boy was first seen at the polyklinik, symptoms of chorea were to the front. Some disturbance of speech even then, however, gave indication that there was something else in the background. At the commencement of the illness the first thing noticed was a certain restlessness in the right hand, and that there was failure to grasp objects firmly with it. These movements gradually made both eating by himself and writing impossible. Then speech became affected. On admission into hospital, along with the movements named there was a pronounced ataxia, worse on the right than on the left, a stumbling gait, with a tendency to spread out the legs, but without any spasm of the adductors. The tonus of the right upper extremity was also distinctly lowered. The movements of the right hand, the fingers and the arm were clumsy. Power was well retained on the arm. There was pronounced adiadochokinesis of the right side, with difficulty in opening the hand after it had been closed, as in myotonia. There was no change as regarded passive movement in the lower extremities, sharp tendon reflexes, no change of the plantar reflex. Slight ataxic disturbance of the right leg, less than in the right arm, no change in the left side. The sense of locality was undisturbed in the upper extremity and also over the abdomen. Muscles of the face paretic on both sides, speech distinctly nasal with disturbance of articulation, but not so much so as to prevent his being understood. The pupils were natural, no signs of pressure, the sensorium quite free. Lumbar puncture gave a strong globulin reaction, slight increase of the lymphocytes, Wassermann reaction negative, even with increased quantity of fluid. During a stay of eight weeks in hospital the condition got worse as regarded gait and speech. At present the boy could scarcely speak at all. Swallowing was difficult, and there was scarcely any movement of the tongue. No change in electrical excitability in the faciolingual region. The tongue was not atrophied. The soft palate and swallowing reflexes were weak. Disturbance of ocular movement to the right, on the left occasionally Babinski's reflex. The disturbance in walking was increasing, so that at times he could scarcely stand. Although no cerebral symptoms were present and the fundus oculi showed no changes, during the last few days a severe pain had come on over the sacrum that had made the child cry out; there was also at times a marked stiffening of the spinal column, but no stiffness of the neck. The speaker believed there was disease of the cerebellum and bulb. Considering the rapid advance in the symptoms it was most probably a new growth. There was no trace of syphilis or tuberculosis except for a slight rise of temperature, which had made its appearance only during the last few days. Both age and the rapid progress were not in favour of any sclerotic process or multiple sclerosis in the regions of the pons. Most probably there was an infiltrating new growth. Possibly the sacral pain and stiffness in the spinal column indicated extension to the spinal meninges; it might be a diffuse sarcomatosis.

At the Urologische Gesellschaft, Hr. I. Israel made a communication regarding

Operations for Ureteral Calculi.

The number of operations for calculi of the ureter was small, but this was owing to failure in diagnosis. Formerly a diagnosis could only be made when the stone was palpable, whilst now it was rendered easy by radiography. He himself had now operated in 58 cases. These calculi passed down from the kidneys, lodged in the ureter, and there grew larger through deposition of salts. There were, however, autochronous calculi developed through some change in the wall of the ureter. Stones were most frequently met with in the small pelvis, and amongst them the interparietal were the most frequent. Palpation was only possible occasionally. In some of the cases the Roentgen plate did not reveal the stone; this was so in 11 per cent. of the cases. There might be insufficiency in the plate with anuria; there were also shadows on the plate which might be taken for calculi, also specks in the pelvis and coprolites; calcified glands might also simulate stones. In 18 per cent. of the speaker's cases the calculi were on both sides. Amongst the cases that were not radiographed two died, amongst those that were, not one—a proof of the importance of radiography. The indications for operation were anuria lasting for 48 hours, bilateral calculosis, retention and infection of the kidney of the affected side. If a stone was so large that there was no hope that it could be passed, then one must operate. Another indication was a fixed pain in the ureter. For operation an extra-peritoneal one was technically the best. Where the stone was deep-seated exact suture was difficult. If one could slip the stone upwards it was a help, but it should only be done if it could with ease. Ureterotomy was the normal procedure. It was insufficient in pyonephrosis, extensive exudations and abscesses. Here nephrectomy was called for. In some cases removal of the ureter was demanded. The mortality had not been great when the infected cases had been separated from the local ones. In 25 extra-peritoneal operations there had been no deaths. The total mortality of his cases had been 4 per cent. The results of extra-peritoneal operations had been absolutely ideal.

AUSTRIA.

Vienna, Sept. 21st, 1912.

"Kubital" Gland and Syphilis.

Goldreich told his clinical hearers not to be led astray by the usual assertion that these glands in the infant and young child were pathognomonic of hereditary syphilis. They were not, but he would not deny they were associated with the disease as they were an outlet for the toxine. He had carefully examined 212 cases of undeniable congenital syphilis and found that these glands were not a trustworthy guide in the diagnosis as this sign was frequently absent, but in the same number of perfectly healthy children, 17 per cent. of infants and 21 per cent. of children had the glands affected. The glands are so frequently swollen in syphilis that the error of an undeniable symptom has been attached to the stigmata.

Spurious Vaccine.

Paul, Director of the State Vaccine Institution, raised an important discussion at the Congress of Medical Officers of Health. He reported two cases as an example of numerous others where the vaccinia, or supposed vaccinia, had been trasmitted from one cow to another as well as the attendant. It was even suggested that the use of the milk had produced an outbreak of cow-pox. In the cows affected the veterinary surgeon had pronounced the affected cows as suffering from cow-pox which had purulent pustules on the udders. On testing the serum biologically by vaccinating the cornea of guinea-pigs, the effect was negative. The bacteriological examination proved the presence of a pure streptococcus found in vaccine where the milk obtained from these cows also contained a virulent streptococcus. He thought a closer study of this abnormality should be made and some definite understanding of a hygienic character was absolutely necessary for the purveyors of milk.

Benedict's Sugar Test.

This test has been under criticism recently and has received a large amount of praise for its simplicity and accuracy. The solution is made by adding 17.3 grammes of copper sulphate, 173.0 grs. of sodium citrate, 100 grammes of sodium carbonate free from water added to a litre of distilled water. Five centimetres of this solution are added to 8 or 10 drops of urine to be tested. After well shaking it is boiled for two minutes, then gradually cooled. If sugar be present a red, yellowish or greenish precipitate is formed, even when only three-tenths per cent. is present. If no sugar, the solution remains clear or retains a light blue cloudy appearance from the urates. The quantitative determination is a simple modification of the qualitative, which is performed by adding potassium sulpho-cyanate to the quantitative solution, when, in consequence of the reduction that takes place, a white copper sulpho-cyanate is formed, so that the final titration can be observed. This method of determining the amount of sugar is claimed to be much superior to Fehling's or Purdy's method in simplicity and exactness. For clinical purposes it is much superior to Lohnstein's fermenting method, which occupies a considerable time, while the results with Benedict's solution can be found exactly in five minutes. It has also an advantage over the polarisation method that expensive instruments are not required, and no mistakes arise from other substances producing left rotation. The solution is also stable, and Benedict recommends for volumetric purposes 18.0 grammes of copper sulphate, 100 grammes of water-free sodium carbonate, 200.0 grammes of sodium or potassium citrate, 125.0 potassium sulpho-cyanate, and 5 cubic centimetres of a 5 per cent. potassium ferrocyanate in a litre of distilled water.

HUNGARY.

Budapest, Sept. 21st, 1912.

The Actinic Treatment of Trachoma.

Dr. Waldmann investigated the basis of success obtained and described by Cohn, of Breslau, with radium in the treatment of trachoma. Waldmann has, in fact, found a theoretical basis for the explanation of the success, inasmuch as it is assured by several investigators that the beneficial effect of radium on malignant growths is due to its power to decompose the lecithin which forms a substantial element of these growths. As the granulations of trachoma also contain a certain percentage of this substance, the effect thereon of radium becomes intelligible. The author picked out seven trachomatous cases of a most pronounced character. The amount of radium used was at first 1 mg.. and lated 10 mg.; time of exposure five to ten minutes. The tube containing the radium was simply applied over the area treated, and slowly moved about without touching the surface. The results were really astonishing. Five of the seven eyes were entirely cured; the other two are in a fair way of becoming so. The absorption of the granules was not accompanied by any untoward effect. The number of sittings varied from eight to fourteen.

Arterio-sclerosis and Iodine.

Dr. Veress said at the recent meeting of the Budapest Royal Society of Medicine that although the use of this drug in the treatment of this condition is very extensive, yet but little is known of its mode of action. He presented the results of a series of observations in young men, otherwise healthy, to whom potassium iodide was administered in daily doses of from 0.3 to 0.5 gr. for periods of ten to fourteen days. It has been claimed that this drug has no vaso-dilating action. Examination of the blood from the experimental subjects showed that there was a marked loss of viscosity, sometimes as much as 10 per cent. This apparently explains most of the therapeutic effects of the drug, as its action, increasing the fluid character of the blood, is equivalent to dilatation of the vessels, for the reason that the stream flows more rapidly. This also shows that the drug must be continued for long periods in order to produce any effects. The serum does not become fluid to the same degree as the blood *en masse*, and sometimes is even increased in density, so that the change appears to be governed by the behaviour of the cellular elements of the blood alone.

Uncommon Forms of Rheumatism.

Dr. Kunitz made some interesting comments on this subject. He believes that a sharp line must be drawn between muscular and joint rheumatism To secure uniformity and to avoid confusion, the term muscular rheumatism ought to be dropped, and the word rheumatism applied to that inflammatory condition of the various locomotive organs and their appendages which results from sudden changes of temperature. Persons inclined to rheumatism need not therefore fear intense uniform cold, but rather over-heating, especially that brought about by muscular exertion, followed by sudden rest and cooling. The quickest and most reliable remedy in cases of fresh or acute rheumatism is exercise. The patient may safely indulge in all those movements which cause pain, but care should be taken to exclude joint rheumatism. Chronic rheumatism can only be cured by mechano-therapy, in which active and passive movements play an important part. Among the rarer sites for rheumatism which are little mentioned in the literature are the following: A rheumatic process in the periosteum of the ribs, the sternum, and localised rheumatism of the muscles of mastication. Instances of these are described where good results were secured in all but that of the diaphragm by forcible massage. For rheumatism of the diaphragm the Faradic current gave some relief.

CANADA.

Montreal, Sept. 16th, 1912.

Annual Meeting of the Canadian Medical Association, held at Edmonton, Alberta.

The North-West of Canada has been honoured as the meeting-place of the Canadian Medical Association only once before. Twenty-two years ago the meeting was held at Banff. In 1904, however, Vancouver, on the Pacific coast, was chosen as the place of meeting. The meeting which took place this year at Edmonton was eminently successful. In spite of the distance to be travelled to reach Edmonton from the eastern part of Canada, no fewer than 500 medical men were present. Doubtless many of them took advantage of the meeting to combine, to some extent, business with pleasure and to view the wonderful country abutting on the Rockies and to take note of the progress made therein. Dr. Herbert A. MacKid, the President, as might be expected from a Westerner, delivered a stirring presidential address. Perhaps the most important part of the address was that in which he referred to the proposed creation of a

National Department of Public Health.

At the Vancouver meeting in 1904 this matter was first mooted. Again, at the first meeting of the Canadian Public Health Association, held last December in Montreal, under the presidency of Professor Starkey, of McGill University, Premier Borden promised that the Government would institute a general reform in public health matters, and place that department on a sound and modern footing. Dr. MacKid voiced the hope that the question would be soon settled, and later on a unanimous vote was passed by the medical men present in favour of the establishment of a Federal Department of Public Health. Reference was also made to Dominion legislation which had come to pass during the past few months solely through the efforts of Dr. Roddick. The passage of the "Roddick Bill" had rendered interprovincial medical reciprocity possible, and the Bill would go down in history as a monument to Dr. Roddick. The speaker paid, too, a well-deserved tribute to Dr. Macphail, of Montreal, for his able editorship of the *Journal of the Canadian Medical Association*, which came into being two years ago. Already the *Journal* has done much towards organising and welding together the profession in Canada. Dr. MacKid, in conclusion, eulogised the North-West, and predicted for the medical profession therein a most rosy future.

The Address in Surgery

was given by Dr. Arthur E. Giles, of the Chelsea Hospital for Women, London. The address was remarkably good, and was a justification of operative measures, especially in the case of inflammatory disease of the uterine appendages. It was pointed out that as long as the operative mortality was high such patients could not be advised to undergo surgical treatment. But now, when, as the figures of the Chelsea Hospital for Women show, the death-rate is as low at 1.3 per cent., an operation of this kind is amply justified. Dr. Giles said that two years ago he was able to show, from a detailed investigation of the after-results of these operations, based on 200 cases in which both ovaries had been removed, that 70 per cent. of the patients regained perfect health and vigour and retained their sex instincts.

With regard to fibroids, Dr. Giles said that when a patient with fibroids had to be told that the resources of medicine were exhausted, and that the succour of surgery was more cruel than kind, it was a great comfort to be able to hold out some kind of hope, however unsubstantial; and so a fairy tale was built up and decorated to represent a scientific theory, to the effect that the menopause was the natural cure for fibroids. And patients were told in all seriousness and good faith, "You must wait for the change of life, and then these tumours will shrink and disappear and you will get well." And the patients went on patiently draining their life blood away, carrying enormous tumours that prevented them from getting about, hoping against hope that the delayed menopause would arrive like some millennium to give them peace. Some of them were spared the worst troubles and escaped with their lives, a few of them regained a measure of health, and the remainder became more or less permanent invalids. Others found that the menopause, when it came, came not to bless but to curse, bringing in its train degenerative changes, infection, sepsis and death. Dr. Giles therefore records as his emphatic opinion that, considering the very small rate of mortality from hysterectomy for fibroids at the Chelsea Hospital for Women, he is justified in the contention that all fibroids should be operated upon, unless some weighty reason to the contrary can be shown, in the early stages, as soon as symptoms arise and without waiting for the development of grave complications; and that whereas in the early days hysterectomy had to be reserved in cases in which it was required for the saving of life, the progress of abdominal surgery had brought it within the scope of operations that are justifiably performed for the relief of suffering and the restoration of health.

(*To be continued.*)

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

BELFAST.

Hospital Abuse.—A series of resolutions on the subject of hospital abuse, which were passed at a meeting of the Belfast Medical Guild on September 5th, have been circulated to members of the staffs of the Belfast hospitals, with a suggestion that a joint meeting of the various staffs should be held to consider them. The resolutions are to the effect (1) that no certificates should be given in hospital, except in medico-legal cases, when a guinea fee should be charged; (2) that no patient should be given attendance at any hospital, except in cases of emergency, without a line from the ordinary medical attendant; (3) that no prescription should be given to an intern patient when leaving hospital, but if necessary the patient should be advised to see his ordinary medical attendant. The second of these resolutions is undoubtedly the most revolutionary, and it is hard to see how it can be made to work. Even now a large number of hospital consultants write to medical men whose cases they have seen at hospital, if such cases happen to be specially serious or difficult, and it is the common complaint that the majority of such letters are never answered. The plan suggested would certainly reduce the numbers in the hospital externs, but whether it would meet with the approval of the public which supports the hospitals, or even with that of the busy general practitioner when he came to try it, is more than doubtful.

Sanitary Condition of Portadown.—At a meeting of the Portadown Town Council held last week, a warm discussion took place on a report from Dr. Rowlett, their energetic Medical Officer of Health. He recommended the demolition of 196 houses, accommodating nearly 1,000 persons, on the ground that they were so defective that it was impossible to remedy them, and that such defects are the cause of, or at any rate aid in spreading, epidemic disease. Naturally the Council was not prepared to accept the recommendations offhand, seeing that, as one member said, there would be very little of their town left if they did so; but the tone of the discussion was on the whole good, and showed a most satisfactory respect for Dr. Rowlett's opinion. The matter has been referred to the Sanitary Committee for investigation.

Lord Kelvin Memorial.—Many old students of Queen's College, Belfast, will be interested to learn that a statue of Lord Kelvin is to be erected close to the University, in the grounds of the Botanic Gardens Park. The site chosen is close to the main entrance of the Gardens, in full view of the Malone Road. It was suggested at one time that it should be placed in the grounds of the University, but as it is being erected by public subscription, under the auspices of the Lord Mayor, there was some difficulty in placing it in any ground not under the control of the town.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE POSITION OF DENTISTRY.

To the Editor of The Medical Press and Circular.

Sir,—I notice that in the current issue of the "Medical Press and Circular" considerable space is devoted to the problem of dental practice in this country. One of your correspondents, who signed himself "A Hospital Dentist," makes a virulent attack on all unregistered men. I venture to think that it would be more statesmanlike to recognise at the outset that the practice of medicine and the practice of dentistry cannot be judged by the same criterion. Permit me to tabulate the bare facts.

(1) A very large number of unregistered dental practitioners conduct their practices in a thoroughly ethical fashion.

(2) A large, though a decreasing, proportion of registered men (qualified by examination) have no better qualification to practise than the foregoing unregistered class, and some who are on the dental register and who are legally protected are druggists, etc., who know little or nothing about dentistry.

(3) A large proportion of dentistry, of the poorer class especially, consists in extractions and purely mechanical work, and many unregistered men are actually more skilled in this respect than men who have qualified by examination, but who have not one-tenth the experience in many cases of the unregistered.

(4) The number of qualified men is not nearly sufficient to supply the dental requirements of the nation, and the suppression of the unregistered men would mean either that the lower middle class and the working class public would go without any dental attendance, or there would have to be established a huge public dental service, rate aided or State supported.

(5) Your readers must bear in mind that a medical practitioner whose practice lies chiefly amongst the working class can, in the great majority of cases, see a relatively large number of patients in a short space of time; but conservative dentistry by a highly qualified dentist cannot be speeded up; hence, the qualified dentist cannot work at the same rate per head amongst the working class as the qualified medical practitioner.

On the other hand, it is practically true that a large number of ignorant and unscrupulous quacks are inflicting an immense amount of injury upon the poorer class. I attribute this unhesitatingly to a large extent to the puffed-up narrow-mindedness of the leaders of dentistry in the past, who were far too anxious to secure social status at least equal to their medical colleagues, rather than to secure dental legislation and administration responding to the national needs. Many of them are still engaged in the useful occupation of seeking oblivion from the facts. There are certainly not less than 25,000 on the list of unregistered dental practitioners in the United Kingdom, as against some 3,000 qualified men. Do you imagine that Parliament will ever consent to take the livelihood from these unregistered men? It is crying for the moon. A regulating Act by all means, but you will never succeed in suppressing the existing unregistered practitioners.

Trusting that you will find space for this protest and explanation,

I am, Sir, yours truly,
An Interested Observer.

London, September 23rd, 1912.

PARSIMONY IN HOSPITAL MATTERS.

To the Editor of The Medical Press and Circular.

Sir,—Your attention has been doubtless directed to an incident recorded of a great Midland hospital, in which a physician was adversely criticised for having ordered strawberries in the month of March to a hospital patient. To make the story complete, it should be added that the strawberries cost 7s. 6d. a basket, and the patient was suffering from "sprue," a disease for which the fruit in question has been recommended by an eminent medical authority on tropical diseases. The insinuation of the critic was that such an expenditure and such a prescription were unjustifiable. If there were any prospect of cure by strawberries, was such an outlay justifiable in view of the funds of the hospital, the needs of the particular case, and the necessities of the rest of the hospital patients? So far as the funds are concerned, a few such patients—for each would require a course of seven and sixpenny baskets—might well cause the authorities of the wealthiest voluntary charity to look askance. We may at once admit that a physician is not bound to consider the cost of remedies he considers essential to the real interest of his patient. But can sprue be cured by strawberries? We doubt if any such effect has ever been recorded, and all who have had to do with that distressing complaint will bear testimony as to its stubborn and refractory nature in spite of every available remedy. What about the rest of the patients and their daily needs of routine medicine and board? It is tolerably clear that in order to treat certain patients in the costly fashion indicated, others must run short.

In many ways the matter raised by Mr. Danvers Power is most interesting; and as the principle involved is one of great interest to the medical profession, I trust some of your numerous readers will favour us with their views upon the subject.

I am, Sir, yours truly,

A Fruit Lover.

Belfast, September 23rd, 1912.

SPECIAL REPORTS.

THE KING EDWARD VII. SANATORIUM.

The fifth annual report of the King Edward VII. Sanatorium (July, 1910—July, 1911) declares that during the year all the beds in the sanatorium have been continuously occupied. During this period 271 patients were discharged. There is the usual complaint common to all sanatorium reports that too many patients in advanced stages of consumption find their way into the institution. Of the cases discharged during the year only 33.5 per cent. could be classed as "early cases" at the date of their admission. No less than 16 per cent. were in an advanced stage.

The treatment, as administered in the sanatorium, is of a conservative type. Tuberculin is only given to a few selected cases, but we gain no information as to the principles which guide the selection. In twenty cases attempts were made to treat secondary infections by suitable vaccines, but in only one were the results satisfactory. Care is taken to provide occupation as far as possible for the patients in lieu of walking exercise.

The results of treatment are tabulated in statistical form. Of 91 cases of "slight severity" the disease was arrested in 54.9 per cent., 34.1 per cent were much improved, 4.4 were improved, and 6.6 remained stationary. Of 115 cases of moderate severity, the disease was arrested in 12.2 per cent., 51.3 per cent. were much improved, 12.2 per cent. were improved, 19.1 per cent. remained stationary, and 5.2 per cent. became worse. Of 44 cases of advanced disease, 20.5 per cent. were much improved, 35.4 per cent. were improved, 22.7 per cent. remained stationary, 15.9 per cent. became worse, and 4.5 per cent. died.

With regard to the after-history of patients, the report draws attention to the difficulties met on account of the growing fear of infection among the public. "A free opening of windows is enough to excite suspicion." It is important that no instance has come to the notice of the staff of a member of the family of a former patient having become consumptive. It is of interest to note that the patients who do best after leaving the sanatorium are clergy and medical men. This is probably because members of these professions can, more readily than others, find occupation in suitable surroundings.

Dr. Radcliffe, Pathologist to the Sanatorium, adds some interesting notes on his work. He has found the Ellermann-Erlandsen method of help in searching for tubercle bacilli in sputum, and he believes it greatly superior to the vaunted antiformin method.

THE BRITISH HOSPITALS ASSOCIATION CONFERENCE.

The third annual conference of the British Hospitals Association was opened at Birmingham last week. Mr. J. B. Clarke, Chairman of the Board of Management of the Birmingham General Hospital, presided, and representatives were present from all the principal centres in the country.

The Lord Mayor (Alderman Bowater) welcomed the visitors, and said, with reference to the Insurance Act, that he supposed the action the hospitals would take would depend on the particular policy that the doctors adopted. He was not going into the matter except to say that he wished the Government would realise that there was a very strong public opinion in favour of doctors being well paid.

Dr. Nathan Raw, Physician and Medical Superintendent, Mill Road Infirmary, Liverpool, read a paper on "The Probable Effect of the Insurance Act upon Voluntary Hospitals and Other Institutions." He estimated that when the Insurance Act was in full swing 30,000 beds would be required to deal with the illnesses of 15,000,000 insured persons. In his opinion, in the course of a few years, when the funds had accumulated, the Insurance Committees would provide their own hospitals for the sole use of insured persons, with a properly paid professional staff, on the lines on which many of the German hospitals were conducted and which worked so smoothly. Of various courses open to the voluntary hospitals, Dr. Raw preferred that by which they would cease to be voluntary institutions and have a fixed scale of charges—first, second and third class, the beds to be open to all citizens (the insured persons would be third class and pay something like 2s. 6d. per day).

Dr. T. Basil Rhodes, Secretary and House-Governor of the North Staffordshire Infirmary, who also submitted a paper dealing with the effect of the Insurance Act upon voluntary hospitals, said it had been suggested that the hospitals should at once announce that they would not treat insured persons except in cases of emergency. That step seemed to him both unnecessary and suicidal—suicidal because the subscriptions from working men would cease at once; and unnecessary because the medical profession and the hospitals' committees could together make such arrangements as would allow of the treatment of insured persons under certain agreed conditions. He suggested that at the end of the financial year every hospital should be examined by a State inspector on certain points touching expenditure and management, and if the report were satisfactory should receive from the State the amount by which the expenditure for the year had exceeded the income.

In the evening the Lord Mayor gave a reception in the Council House.

Among other interesting papers read was that by Mr. J. Danvers Power, member of the Council of King Edward's Hospital Fund, on "Hospital Management Considered with Reference to Responsibility."" He contended that hospital "scandals" would scarcely ever be heard of if responsibility were properly allocated at the outset. Committees were frequently blamed for what they had no real power to prevent. A case in point was the admission of patients. In one of the London hospitals a surgeon with twenty beds had, in the first eight months of the present year, sent in 74 patients by his personal request; they came straight in, others had to take their turn afterwards. He did not criticise this, beyond saying that the responsibility should rest on the surgeon. With regard to divided responsibility, Mr. Power referred to the work of the staff and the lay committee, and said that about professional work there should be no question. At the same time there were cases where a committee responsible for expenditure refused to carry out the orders of a single doctor. A secretary had written to him that, a physician having ordered in March strawberries at 7s. 6d. a pound for a patient, he refused to supply them. The patient was suffering from some obscure West African disease, and the physician took the matter to the committee, who supported the secretary. Mr. Power said that in such a case the position of the committee was unsatisfactory, and he himself did not see any half-way house between ceasing to admit certain classes of cases altogether and leaving disputed points about treatment to the final decision of the staff There should be no two kinds of responsibility attached to one class of hospital business. Similarly, if a central collecting fund prohibited the applying of its grant to medical education, the responsibility for misapplication of the money should rest on the treasurer of the hospital. If he were attacked from outside then an impartial inquiry should be held and the attack should be substantiated. Any other course would be certain to lead to more or less damaging criticism, because there would be a faulty distribution of responsibility. He was very strongly opposed to official interference with local management, but if advice must be given by central authority, at least let it be accompanied by responsibility. Then at any rate it gave all the guarantee in its power.

Mr. A. W. West, Chairman and Treasurer of St. George's Hospital, London, in opening the discussion, said he remembered the case of a hospital in which it was considered that the amount of spirits consumed was excessive. Three monthly returns showing clearly the amount ordered by each physician and surgeon were made out and circulated among the staff. The amount of spirits ordered was reduced by one-half very quickly, because the responsibilty was placed on those ordering it to justify their action. There was still further room for improvement in the system of hospital accounts.

Mr. Gilbert Barling, Senior Honorary Surgeon, Birmingham General Hospital, remarked that if they were to be starved in the matter of scientific developments, he would rather see the voluntary system pass away and be replaced by a municipal hospital system—not by a Poor-law hospital system. Hospital treatment was bound to be more and more expensive as it was more specialised. For instance, fifteen years ago they knew nothing of radiography; to-day it was costing the Birmingham General Hospital several hundred pounds a year, and there was value for it in the service of the hospital.

Mr. Montague Browne, Northampton General Hospital, thought that if the voluntary hospital lived they would have in many matters to put their house in order or somebody else would put it in order for them.

REVIEWS OF BOOKS.

SYPHILOLOGY. (*a*)

Much work has been done in connection with the pathology and treatment of syphilis and venereal disease since the first edition of this book was published. The author has succeeded in producing a compact and comprehensive treatise on these important subjects which contains all that the practitioner or student is likely to want. Methods of obtaining the spirochætes and of mounting and staining them are well described, and a good account is given of the serum diagnosis of syphilis, as well as the interpretation of the results of the Wassermann test. Whether the "syphiline" test, as experimented with by Fontana with the object of producing a cutaneous reaction, is likely to be as useful as the Wassermann reaction, time alone will prove. The merits and drawbacks of salvarsan are well discussed, but it may be noted that the author is of the opinion that "the great majority of cases of syphilis can be cured with mercury and iodides." A useful list of substances, with their strengths, suitable for injection in gonorrhœa is given at the end of the book. The chapter on syphilis in relation to life assurance and marriage is an important one. Blaschko's advice is quoted to the effect that, upon the average, a life may be accepted four or five years after the onset of the disease, in the absence of symptoms. With regard to marriage, Dr. Marshall considers that an arbitrary time-limit is both dangerous and unscientific, and that the duty of the medical man lies in explaining the whole situation carefully to his patient. The book is excellently got up and is pleasant to read.

SKIN DISEASES. (*a*)

In "Golden Rules of Skin Practice" Dr. David Walsh has succeeded in compressing within a very small space a vast amount of information indispensable to the student of dermatology. This concise little manual has now reached its fourth edition and it has been brought fully up to date. It is just the book for a student or practitioner to keep in his pocket while he is "taking up skins," for its pages abound in terse little aphorisms, easily learned and remembered, so that the main facts relative to the diagnosis and treatment of a given case can be readily assimilated.

Believing that the treatment of dermatological cases can be studied more or less as a thing apart from diagnosis and pathology, Dr. W. Knowsley Sibley has endeavoured in his "Treatment of Diseases of the Skin" (*b*) to produce a manual of reference for the use of dermatologists, practitioners and students, embodying the various treatments employed for the ordinary, and some of the rarer, diseases of the skin, which are ranged in alphabetical order. The more modern methods of dermatological therapeutics are dealt with in a concise but intelligible fashion, such as cataphoresis, high-frequency currents, vaccines, electrolysis, Bier's hyperæmia, solid carbon dioxide, etc. We had expected to see more than half a page devoted to the administration of salvarsan in syphilis, whereas nine pages are occupied with a description of the various methods of giving mercury and the iodides. While acknowledging the value of X-rays in the treatment of ringworm of the scalp, of which a good account is given, the author states that "the most scientific way for the drug treatment of ringworm and allied affections should be by a process of cataphoresis, by means of which the drug used is actually driven into the deeper tissues of the skin, largely through the hair follicles, and so in this way must be applied to the seat of the disease." This is very true, although we object to the word "cataphoresed."

The omission of any account of liquid air, the dismissal of radium in one line, and the disproportionate amount of space devoted to Bier's hyperæmic method (twenty-five pages), may, presumably, be accounted for by the author's special experience with the latter treatment. We do not find any reference to the newer cell-proliferants which have been found of service in the treatment of the various forms of ulceration. The treatment of lupus vulgaris is fully described, and we notice that Dr. Sibley has obtained good results by the use of the solid carbon dioxide, though, curiously, there is no mention of this agent in the treatment of lupus erythematosus, in which it gives equally good, if not better, results. The author has found the plan of dissolving the snow in ether or alcohol useful for painting upon cutaneous lesions where a continuous application without pressure is desired. It is easy, however, to be hypercritical in dealing with a work of this kind, and we are of the opinion that this book, in spite of the defects we have indicated, will prove a useful and serviceable companion to the dermatologist and prac-

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(*a*) "Syphilology and Venereal Disease." By C. F. Marshall, M.D., M.Sc., F.R.C.S., Surgeon to the British Skin Hospital. Second Edition. Demy 8vo. pp. xii., 560. With 6 plates. London: Bailliere, Tindall and Cox. 1912. Price 10s. 6d. net.

(*a*) "Golden Rules of Skin Practice." By David Walsh, M.D., Senior Physician, Western Skin Hospital. Fourth Edition. Bristol: John Wright and Sons, Ltd. 1912. Price 1s.

(*b*) "The Treatment of Diseases of the Skin." By W. Knowsley Sibley, M.A., M.D., B.C.Cambs., M.R.C.P., Physician to St. John's Hospital for Diseases of the Skin. Pp. 280 London: Arnold. 1912. Price 5s.

titioner alike. There are several excellent photographic illustrations and a good formulary of baths, lotions, etc., at the end of the book.

PATHOLOGY. (*a*)

The third edition of this excellent work will be welcomed by all interested in pathology, whether as students or as medical practitioners. The peculiar charm of the book lies in its condensation, whereby the matter is restricted on the one hand to simple statements of fact, and on the other to a lucid summary of existing theories. In spite of the advances of pathology during the past generation one is constantly reminded in a work of this kind of the many gaps in our knowledge. Little is known, for instance, about xanthorna, with its peculiar site of election, and we are informed simply that it is a "yellowish neoplasm occurring about the eyelids, and, structurally, in an embryonic adipose tissue." No hint is given as to its possible microbial origin or degenerative significance, perhaps because of the lack of trustworthy information upon these points. Nor, probably for similar reasons, do we find amongst the non-malignant growths any mention of the interesting group recently described under the title of multiple benign epithelioma of the skin. If we turn to the field of positive knowledge, we find little room for criticism. The subject of gout, for instance, is dealt with in a clear and comprehensive way, and no important theory or observation is excluded. With regard to the uric acid dyscrasia we are told that:—"A disorder or group of disorders is associated with the excessive formation of uric acid. One of the chief of them is gout or podagra; migraine and neuralgias also often seem to be dependent on the same cause, while Haig and others, it can hardly be doubted, have exaggerated the importance of uric acid, and have ascribed all sorts of disorders to its presence in the body, a condition which has been termed "*uricacidæmia*, or the uric acid diathesis." An interesting account is given of the present stage of our knowledge and theory with regard to malignancy. The following note is made of changes that have a practical application in the diagnosis of doubtful cases. "Blood," it is observed on p. 85, "normally has a certain degree of anti-tryptic action, in cases of carcinoma and sarcoma this power of inhibiting trypsin is increased to double the normal or more. Mackenzie and Rosenheim have also shown that the lipolytic power of the serum is likewise increased in cancer cases." Again (p. 258), it is said: "A combined increase in the anti-tryptic power and in the lipoclastic accelerating action of the serum is highly suggestive of malignant disease." In a notice such as the present, however, it is impossible to give more than a general outline of a book that covers so much ground, and this may be conveyed by the statement that it forms a concise, accurate and readable guide to a subject of growing practical importance to medical men in every branch of practice. The text is associated with a large number of illustrations, of which the numerous micro-photographs will be found most helpful. The book can be recommended to students and practitioners as one of the best practical text-books on the subject in the English language.

SEXUAL HYGIENE.

The question has often been discussed as to what degree of information, if any, should be imparted to the youth of both sexes upon sexual matters. Some purists have adopted the ostrich-like policy of deliberately ignoring the plain facts, preferring, apparently, that the rising generation should acquire this knowledge by clandestine means rather than that they should be enlightened by wise and helpful counsellors. If parents, guardians and teachers will not recognise their responsibility towards their young charges in this direction they have only themselves to thank when bad habits have been formed and lives ruined. The knowledge of the elementary hygiene and physiology of the reproductive system is quite as important as that of the digestive organs, and ignorance of the natural functions of the former may lead to results far more disastrous than in the case of the latter. The cry of many a blasted soul and ruined body to-day is: "If I had only known; if only someone had told me!" The difficulty lies in the selection of the methods by which timely information may be given at the critical period of puberty. There are certain drawbacks connected with the systematic class-teaching of sexual matters in schools and colleges, though there is much to be said in favour of the holding of small classes or "talks" upon the subject, preferably by a practical and sympathetic physician of either sex. There have been books written with the idea of educating the growing child regarding these matters, but the majority of them have been mawkish, too technical, or even bordering upon the offensive. We welcome, therefore, the series of small manuals in which the right note has been struck at last by Dr. E. B. Lowry (*a*). *False Modesty* deals plainly but simply with the results of ignorance of the functions of the reproductive organs in both sexes. *Herself* is a little larger book treating of womanhood in all its aspects from the physiological standpoint, suitable for young women and elder girls. *Confidences* treats in an elementary fashion of the phenomena of growth and reproduction, couched in simple language, and designed for placing in the hands of a girl from ten to fourteen years of age. In *Truths*, similar facts are presented for the instruction of boys. Each of these books may be safely taken by parents as a guide to help them in protecting their sons and daughters and in educating them upon the all-important subject of sex hygiene.

In the fourth edition of Dr. Vecki's monograph (*b*) every variety and form of *impotentia cœundi et generandi* is fully dealt with, and the author has endeavoured to reflect the gains introduced by urology. The chapters on anatomy and physiology have also, more especially in their relations to the modern conception of sexual neurasthenia, been revised. Dr. Albert Abrams contributes a short report upon the treatment of impotence by Freud's method of psycho-analysis. This book still retains its premier position in works dealing with this subject.

PRESCRIBER'S FORMULARY AND INDEX. (*c*)

The compression of much material within a limited space appeals to many individuals, and it is to these that we can heartily recommend this little pocket book. Its size is tiny (3¼ in. by 4¼ in.), but within its pages will be found considerable useful information which the busy practitioner is likely to need when writing a prescription, and since it includes only those drugs which the pharmacist can readily supply any feeling of uncertainty is eliminated.

The book is divided into four parts—(a) Internal Treatment; (b) Regional Remedies, including dental, nose, throat, and ear, eye, genito-urinary and rectal; (c) External Treatment; and (d) Synthetic Preparations. Scattered throughout are definite prescriptions which the author has found to be of value in the conditions indicated, and these make the work of additional utility. A *lapsus calami* appears on p. 40, the plural of "haustus" being given as "hausti." This error, however, will readily be corrected by the intelligent reader. While the book is hardly intended for the medical man who relies on the modern proprietary remedies, and who is unable to combine drugs in the form of a satisfactory prescription, yet, for him who has this requisite knowledge to hand, Mr. Beddoes is to be congratulated on producing a booklet which will render material assistance.

(*a*) "Pathology, General and Special." By R. Tanner Hewlett, M.D., F.R.C.P., D.P.H., Professor of Bacteriology in the University of London, etc., etc. Third Edition. London: J. and A. Churchill. 1912.

(*a*) Chicago: Forbes and Co. 1912.

(*b*) "Sexual Impotence." By Victor G. Vecki, M.D., Consulting Genito-Urinary Surgeon to the Mount Zion Hospital, San Francisco. Fourth Edition, enlarged. Pp. 394. Philadelphia and London: W. B. Saunders Co. 1912.

(*c*) "Prescriber's Formulary and Index to Pharmacy." By Thomas Pugh Beddoes, M.B., B.C.Camb., F.R.C.S.Eng. Pp. 132. London: Bailliere, Tindall and Cox. 1912. Price 2s. 6d. net.

SUMMARY OF RECENT MEDICAL LITERATURE ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

The Origin of Epithelial New Growths of the Ovary.—Goodall (*Surg., Gyn. and Obs.*, xiv., 6) thinks that from a study of comparative embryology, histology and function, largely in the ovaries of cows, which closely resemble the human ovaries, numerous facts can be deduced and explained. It is common for human ovaries to contain quite a quantity of fœtal rests, and the arrest of complete expunging of functionless tissue is always bilateral when present at all. The rete ovarii in the human occupies a different position relative to the ovary as compared with other vertebrates. In many cases it is removed from the stroma in the beginning of the hilum, but this situation is not proof of its parovarian origin. Goodall insists strongly upon the germinal origin of the rete ovarii and other structures, because it gives a new view as to the origin of tumours of the ovary. The reason why the ovary is more subject to new growths than the testicle is that the former contains so much that is not necessary to its economy, while the latter is a finished organ. Fœtal rests are generally bilateral, which explains the common occurrence of bilateral malignant tumours. The varied structure of the new growths is considered another argument in favour of this mode of origin. The fact that many tumours contain cilia is answered by the fact that the cells of the rete ovarii are frequently ciliated, and that ciliated epithelium has been found on the surface of the ovary and in cavities opening on to the surface of the ovary. All the structures normally and occasionally to be found in the human ovary are of germinal origin except the supporting stroma. The author has come across no structure in the ovarian tissue that can be associated with parovarian rests. In women past 35 years of age a dipping of the germinal epithelium into deep crevices is nearly always found, and the more recent of these are invariably associated with almost completely resolved corpora lutea. "This is one type of acquired new growth. Inflammation gives rise to another. Germinal rests may also exist as a result of primitive clefts as found in lobulated fœtal and child's ovaries. In no case has an indication been found of the origin of tumours from Graafian follicles. Cysts of the corpus luteum are secondary to either infection with abscess formation or liquefaction of a large hæmatoma of the corpus, and are mere retention cavities. There are two types of interstitial cells—the adult fibrous tissue, or supporting structure, and the small embryonic cell which is the parenchyma of the ovary. The ovary contains two secreting structures, the corpus luteum and the parenchyma cells. These latter are the true continued internal secretory structure of the ovary. The corpus luteum secretion may be the same, but is a special structure for the purpose of reproduction. Cancer has two elements in its production—the presence of congenital remains or acquired defects, and some general diathetic change which operates upon these structures. F.

An Operation for Retro-displacement of the Uterus.—Willis (*Surg., Gyn. and Obs.*, xiv., 6) describes the operation as folllows:—"Each round ligament is grasped 1½ to 2 inches from its origin at the uterine cornua, a linen thread is passed through one ligament, then through the fundus of the uterus on the anterior surface half an inch from the apex of the uterus, and then through the other round ligament. This suture is then tied, bringing the ligaments together. The suture is continued downwards, using the broad ligament instead of the round ligament for three or four stitches. The uterus is then left, and the broad ligament plicated to within half to three-quarter inches from the reflection of the peritoneum to the bladder, and then the suture tied off. An interrupted suture is placed so as to secure the round ligament to the uterus half way between its original insertion and its new attachment." [NOTE.—This operation has been tried by the writer of this summary, and gives most excellent immediate results. It is very simple to perform, and has the advantage that there are no new bands or adhesions formed in the abdomen, and no perforation of the fasciæ of the abdominal wall other than the incision for laparotomy.] F.

Observations on Induction of Labour.—Broadhead (*Amer. Jnl. Obs.*, lxv., 5) says that for induction of labour with the modified Champetier de Ribes' bag, sizes two and three, are most useful. Accidental rupture of the membranes occurs in only 3 per cent. of all cases. In 90 per cent. labour was induced by the use of not more than two bags, and in 70 per cent. one bag was sufficient. Anæsthesia is usually unnecessary. In 37 per cent. labour starts at the time of introduction of the bag, and in 70 per cent. within 12 hours, the average length of time being eight hours in primiparæ, and ten hours in multiparæ. The cord presented or prolapsed in 4.3 per cent. The mortality in private work is practically nil and in hospital slight. F.

The Pathology of Epilepsy.—Clark (*Boston Med. and Surg. Journ.*, July 18th, 1912), examines for us in an interesting way the recent work which has been done in the study of epilepsy. Advance has mainly been made along two lines (1) the hereditary nature of the disease, and (2) the bearing which disorders of metabolism and perversion of the internal secretions of the ductless glands have on its pathology. Investigations concerning the hereditary transmission of idiopathic epilepsy have, according to Clark, not been at all so suggestive as have similar investigations concerning the transmission of feeble-mindedness. Clark contends that where the hereditary nature of the disease is admitted the prognosis is rather better than among other patients, and states that two-thirds of the recoveries among his patients occurred in patients where the disease was transmitted. The investigation into the toxæmic origin of epilepsy has not advanced far at present, but some advance has been made, and the experiments of Meyer and others seem to show that the toxic substance which is the direct cause of the fits is to be found in the blood serum. At one time it was supposed that this toxin was absorbed from the alimentary canal and was the result of faulty metabolism and elimination. That this is not the entire explanation is shown by the fact that "when the digestive apparatus has been put quite right, at least so far as one is able to judge, the great majority of epileptics, about eighty per cent., still continue at more or less regular intervals to have seizures." Clark concludes with the recommendation that "the sedative treatment of epilepsy is to be thoroughly discouraged so long as there is hope of bringing the real clinical pathogenesis of the disease under control."

K.

Therapeutic Injections of Deep Sea Water.—Keck (*Pacific Med. Journal*, August, 1912), has for some time been in the habit of using the isotonic solutions of sea water recommended by Quinton of Paris, but he now finds that he gets better results by using the sea water in its full strength. The water used is obtained one thousand miles out at sea and at a depth of fifty feet below the surface. Such water is practically sterile and is on the average about five times as strong as normal salt solution. It is sterilised by exposure to the ultra violet rays, and diluted till it is four times as strong as normal salt solution. As a rule 25 to 30 cc. of this solution are injected intramuscularly three times a week for two or three weeks. The quantity may be gradually increased till a feeling of fulness in the head and lassitude are produced. Keck finds that over-doses do no harm beyond causing needless fatigue, but too small a dose is of no value at all. The treatment has proved effective among patients suffering from a great variety of diseases, and can be carried out without the patient being confined to bed.

K.

The Pathological Anatomy of Old Age.—Salimbecci and Géry (*Annales de l'Institut Pasteur,* August 25th, 1912) publish an interesting anatomical and pathological account of the body of an old woman of ninety-three years of age. All the organs and tissues were carefully studied. They found certain characteristic changes almost universal—viz., sclerosis, mono-nuclear and poly-nuclear infiltration, hypoplasia, cellular degenerations, and calcination. They believe that these are the principal processes of senescence in all organs. The most striking was the sclerosis, itself consequent on leucocytic infiltration. The hypoplasia was manifest in the glandular organs, though, on the other hand, the adrenals showed hyperplasia The cellular lesions were less general, but were well marked in the liver and pancreas. Calcification chiefly affected the vessels. The observers agree with Metchnikoff that the absorption of intestinal poisons plays an important part in the production of the lesions of old age. It does not, however, stand alone. They enumerate four other groups of influences—(1) infection ascending to glands by their ducts; (2) the infinite series, in the course of a long life, of infective diseases and exogenous intoxications, each of which destroys its share of parenchyma; (3) wearing out and old age of the cells, apart from sclerosis and inflammation; (4) the loss of power of cellular reproduction. The article is illustrated by excellent plates. R.

Anti-rabic Vaccinations at the Pasteur Institute.—Viala (*Annales de l'Institut Pasteur,* August 25th, 1912) gives figures for 1911 of the treatment undertaken for the prevention of rabies at the Pasteur Institute in Paris. Three hundred and forty-two persons were treated, of whom none died. This is the second year in succession in which the treatment proved successful in every case, a result never obtained previously. The number of cases treated continues to diminish. In 1910, 401 were treated, in 1907, 786, while the greatest number (2,770) was in the second year of the Institute, 1887. The highest mortality, both absolutely and per cent., was in the first year of the Institute, when there were 25 deaths, with a mortality of 0.94 per cent. Of the 342 persons treated last year, 76 had been bitten by animals in whom rabies was proved to exist, 114 by animals diagnosed as rabid by a veterinary surgeon, and 152 by animals suspected of rabies. We note that three patients from England were treated. R.

Medical News in Brief.

Alcoholism and Insanity.

The report of the Inspectors of Lunatics (Ireland) for the year ended December 31st, 1911, has recently been issued as a Blue Book [Cd.6386]. It states that the number of lunatics in asylums—24,655—shows an increase of 261 on the number for the previous year, when the corresponding increase was 250. But the increase for 1911 was 61 less than the average increase for the ten preceding years, which was 322. The number of insane under care has increased from 250 per 100,000 of the population in 1880 to 563 per 100,000 in 1911. The average rate of increase for the past five years was more than 5 per annum, whereas the average rate during the entire period was more than 10 per annum.

The number of insane resident in public asylums (other than criminal) and workhouses about the beginning of the year under review was for the whole of Ireland 23,174, or 5.3 per 1,000 of the population; but the distribution is very unequal, varying from 2.6 per 1,000 in County Down to 9.2 in Waterford. The very large proportion of insane in County Waterford is exceedingly difficult to explain, but it appears that insanity tends to prevail in the agricultural and rural counties. The order of the four provinces is: Munster, 6.1 per 1,000; Leinster, 6.0; Connaught, 5.2; and Ulster, 4.2.

With regard to the question of "alcohol as a cause of insanity," the report states that the facts indicate that there is practically no relationship between the distribution of insanity and that of drunkenness in Ireland. Chronic alcoholism is so small in Ireland that it can have no great influence on the insanity rate.

The expenditure incurred in the maintenance of the average number of 20,112 patients in district asylums during the financial year ended March 31st was £587,597 11s.

University of London—King's College.

More accommodation has for some time been urgently needed in the departments of Bacteriology and Public Health. This has now been provided, with the sanction and approval of the University, by the removal of these departments, with their staffs, to 62 Chandos Street, Strand (Charing Cross Medical School Buildings), where an excellent suite of laboratories is at present vacant owing to the transference of the Charing Cross Medical School's preliminary and intermediate medical studies to King's College. The laboratories at Chandos Street are being altered and refitted, and the accommodation there provided will comprise a large class laboratory, research laboratory, professor's laboratory and lecturer's laboratory for each department of Bacteriology and Public Health respectively, a photo-micrographic laboratory, preparation and animal rooms, a large theatre, office and library for the joint use of the two departments. There will be the regular courses of instruction in bacteriology, clinical pathology, and photo-micrography, and for the Diploma of Public Health. Research and investigation work for public bodies and others will also be carried on as before. The new laboratories will be opened on or about October 1st. The laboratories vacated at King's College by this removal will be utilised for increasing the accommodation for the preliminary and intermediate medical studies.

The City of London Medical Officer.

The salary of the City of London Medical Officer was brought to the notice of the City Council last week in the report of the Officers and Clerks Committee, which recommended that the salary be £800 per annum, rising £50 per annum at the discretion of the court to a maximum of £1,000. Mr. Hugh Shirreff thought that the position occupied by the City's Medical Officer, as the first in England, would be prejudiced if his salary were reduced from £1,000 to £800, which was what the Committee's report, if carried, would do. He moved that the commencing salary should be £1,000. This was seconded, and the matter was adjourned.

Gresham Lectures, 1912.

Dr. F. M. Sandwith, Gresham Professor of Physic, will deliver a course of four lectures on Tuesday, October 15th, and three following days, at the City of London School, Victoria Embankment, E.C. Each lecture will begin at six o'clock. The subject of the course will be the "Relief of the Sick and Wounded in Time of War."

Honour for a Woman X-Ray Victim.

Mlle. Weidemann, the first woman to fall a victim in the cause of duty to the effects of X-rays, has just been decorated with the medal of honour by the French Minister of the Interior. While working in the laboratory of a Paris hospital her hands were attacked by X-ray dermatitis, and last year both her arms were amputated. This, however, did not arrest the disease, and little hope is now entertained of her recovery.

NOTICES TO CORRESPONDENTS, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

TO MEDICAL FREEMASONS.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—May I, through the medium of your widely read columns, appeal to medical men, and medical Freemasons in particular, for votes for the Masonic charities.

At the forthcoming elections there are several medical candidates. Votes for any of the Masonic institutions are equally acceptable, as exchanges can be effected, and will be gratefully received and acknowledged by me.

I am, Sir, yours truly,
WILLIAM WILSON,
Secretary, St. Luke's Medical Lodge of Instruction.
184 Goldhawk Road, 1912.
September 17th, 1912.

A DAILY REGISTER FOR CONSUMPTIVES.

MESSRS. PARKE, DAVIS AND CO., have just introduced a neat and handy form of "Daily Register," prepared at the suggestion of Dr. de Carle Woodcock, of Leeds, for use by patients undergoing tuberculin treatment. Each page of the book records the progress made during the week, and full instructions are given to enable patients to fill in the required details themselves. The "Daily Register" is sent out in varnished envelopes, which keep clean, and are easily washable. The price is 6d. a copy.

DR. W. P. F. (Parkeston).—We have not been able to trace the article to which you refer. One case of angio-neurotic œdema cured by salvarsan has, however, been described by Dr. C. W. Burr, of Philadelphia, in the *Journal of Nervous and Mental Disease*, Lancaster, July, XXXIX., No. 7.

OUT-PATIENT HUMOUR.

Speaking of Out-patient practice at St. Bartholomew's Hospital, the editor of the School Journal says:—"No day passes without its element of humour. One can go on rejoicing after dealing with the man who, when given a lin. sap. ticket with the injunction, "Rub your leg with this," goes behind the screen and literally massages his leg with it; and with him who, when asked the question one would ask of another suffering from a chronic hydrarthrosis of the knee-joint, replies, "No, sir, I don't smoke"; or with the old lady with a smart attack of scabies, who attributes her malady to a shock received in the train when coming home from Yarmouth last summer holidays."

THE CITY OF CARDIFF MENTAL HOSPITAL.

IN the last annual report of the City of Cardiff Mental Hospital it is stated that the scheme for the provision of a laboratory for physiological research, by enlarging the pathological laboratory, has received the sanction of the Secretary of State, and that the work is about to be proceeded with by the building staff of the institution. When this is complete all the facilities of a modern mental hospital in touch with a University centre will be available for young medical men desirous of tuition and anxious to conduct research in mental diseases. The recovery-rate, it is satisfactory to note, has been conspicuously low, being 60 per cent. for 1911, which has been a source of much gratification to the medical and the nursing staff

Appointments.

COOMBS, HAROLD MARTIN MCCULLOCH, M.B., B.C.Camb., L.R.C.P. Lond., M.R.C.S.Eng., House Physician, Bedford County Hospital, Bedford.

FALCONER, A. W., M.D., Ch.B.Aberd., Assistant Physician to the Aberdeen Royal Infirmary.

FERGUSON, J. BELL, M.B., Ch.B.Edin., D.P.H.Manch., Chief Tuberculosis Officer for the City and County of York.

HEY, W. H., F.R.C.S.Eng., Honorary Surgeon to Ancoats Hospital, Manchester.

MORLEY, JOHN, Ch.M.Manch., F.R.C.S.Eng., Honorary Surgeon to Ancoats Hospital, Manchester.

PATRICK, J. KING, M.B., Ch.B., B.Sc.Glasg., D.P.H.Dub., Assistant Medical Officer of Health and Medical Officer in Charge of Tuberculosis Dispensary in the County Borough of Leicester.

Vacancies.

Royal Victoria Eye and Ear Hospital.—Two House Surgeons. Salary £40 per annum with board. Applications to the Hon. Secretary, Adelaide Road. (See advert.)

Buenos Ayres British Hospital.—Assistant Resident Medical Officer. Salary £200, rising £25 annually. First-class passage paid. Board and rooms in Hospital provided. Applications to Dr. Colbourne, Llanfair, Beckenham, Kent. (See advert.)

West Herts Hospital, Hemel Hempstead, Herts.—Resident Medical Officer. Salary £100 per annum, rooms, board, and washing found. Applications to Robert. L. Butterfield, Clerk.

Dewsbury and District General Infirmary.—House Surgeon. Salary £100 per annum, with board, residence, and laundry. Applications to Edward Hemingway, Secretary.

Hampstead General and North-West London Hospital.—Casualty Officer. Salary £140 per annum, with board, residence, and laundry. Applications to A. E. Thomas, Secretary, Haverstock Hill, N.W.

County and City Asylum, Powick, Worcester.—Junior Assistant Medical Officer. Salary £160 per annum, with board, furnished apartments, washing, and attendance. Applications to Medical Superintendent.

Stirling District Asylum, Larbert.—Junior Assistant Medical Officer. Salary £140 per annum, with board, lodging, and laundry. Applications to the Medical Superintendent.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointment:—Kilmakevoge (co. Kilkenny).

Royal Victoria Hospital, Folkestone.—House Surgeon. Salary £100 per annum, board, residence, and laundry found. Applications to the Secretary.

North Lonsdale Hospital, Barrow-in-Furness.—House Surgeon. Salary £100 per annum, with board and attendance. Applications to be sent Secretary, North Lonsdale Hospital, Barrow-in-Furness.

St. James' Infirmary of the Wandsworth Union, Ouseley Road, Upper Tooting, S.W.—Junior Assistant Medical Officer. Salary £120 a year, with board, lodging, and washing. Applications to the Medical Superintendent.

Tooting Bec Asylum.—Third Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

Births.

BOURKE.—On Setember 22nd, at 8, Moreton Gardens, South Kensington, the wife of Wm. H. Bourke, M.D., of a son.

DEANE-BUTCHER.—On September 20th, 1912, at Pittsworth, Queensland, Australia, to Dr. and Mrs. Bazett Deane-Butcher, a son.

EDELSTEN.—On September 14th, at 370, Brixton Road, S.W., the wife of Ernest A. Edelsten, M.B., M.A.Oxon, of a son.

HOWARD.—On September 19th, at Argyll House, Frome, the wife of C. R. Howard, M.D., of a son.

LEVY.—On September 18th, at 67, Wimpole Street, Cavendish Square, W., the wife of A. Harold Levy, F.R.C.S., of a son.

LONGSTAFF.—On September 18th, at Ridgelands, Wimbledon, the wife of Dr. Tom George Longstaff, of 93, Whitehall Court, S.W., of a daughter.

PANCKRIDGE.—On September 15th, at Winton House, Petersfield, the wife of W. P. Panckridge, M.B.Lond., of a daughter.

STOKES.—On September 19th, at The Laurels, Sutherland Avenue, Bexhill-on-Sea, to Dr. and Mrs. Kenneth Stokes, a son.

WALDO.—On September 22nd, at 40, Lansdowne Road, Holland Park, W., the wife of Frederick Joseph Waldo, M.D., Barrister-at-Law, of a daughter.

WORTON.—On September 16th, at Darley Dale, Hadley Wood, the wife of A. S. Worton, M.D., F.R.C.S., 71, Harley Street, W., of a son.

Marriages.

BAINES—RANSOME.—On September 11th, at the Mission Church, Lytton, British Columbia, Mark Blakiston Baines, M.B. Oxon, fifth son of Mr. and Mrs. Henry Baines, of Oxford, to Violet Grace, only daughter of Mr. and Mrs. Stafford Ransome, of 15, Redcliffe Square, South Kensington.

REEVES—DERRY.—On September 18th, at St. Matthew's Church, Upper Clapton, Conrad Reeves, M.R.C.S.Eng., L.R.C.P.Lond., of Alfriston, Sussex, third son of Mr. Herbert Reeves, late of Emsworth, Hants, to Hilda, the only daughter of Mr. and Mrs. Thomas Derry, Lynton House, Osbaldeston Road, Stamford Hill.

Deaths

RANKIN.—On September 11th, at Bexhill, in his 63rd year, John E. Rankin, M.D., F.R.C.P., of Tunbridge Wells.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, OCTOBER 2, 1912. No. 14.

NOTES AND COMMENTS.

Police and Fortune-telling.

THE profession of fortune-telling by means of palmistry, astrology, crystal-gazing and the rest of the weird methods adopted by its followers, has long ago been banned by the law. Persons who make money by its exercise come under the designation of rogues and vagabonds, or some such technical legal classification, and are liable to be dealt with accordingly by summary jurisdiction. In spite of these drawbacks, however, the calling thrives more or less in all parts of the United Kingdom. The police, for reasons best known to themselves, confine their attention for the most part to the operations of the fortune-teller who draws small sums of money from the poorer classes of society. As a rule, those who cater for the well-to-do in this remarkable line of industry are permitted to go their own way without let or hindrance, provided they do not cross the boundary line which lies between innocent and criminal practices. In London the number of persons engaged in palmistry and similar arts is said to have increased enormously of late years. By some curious freak of evolution in a matter of this kind Londoners are not permitted to rule in their own house, but have to trust to the energy and judgment of the Home Office, which controls the police of the metropolis. Of late some public interest has been aroused as to palmists and others of the fraternity. The police, so it is said on apparently good authority, have issued a notice prohibiting in future the advertisements by such persons, whether in the public newspapers, by means of sandwich men, or in other ways. If this be the case the Commissioners of the London police and the Home Office may be congratulated on the logical decisiveness of their belated action. The principle adopted by them is Napoleonic in its directness. Strike at the advertisement and this illegal traffic withers and fades as grass in the oven. Why should not the London police apply a similar wholesome restriction to other forms of objectionable trading?

A Fine Social Field for the Police.

WHAT an enormous field for social reform is thus opened up for the Home Office! A glance through the daily newspapers reveals a number of advertisements of an obviously improper or fraudulent nature, some of them referring to swindles that have been publicly exposed again and again, yet no action is taken by the police who are professedly created to protect the interests of the public. Some of the smaller magazines contain advertisements of a suggestive kind that would probably secure instant condemnation by a magistrate if made the subject of a police prosecution. Then there are the proprietary articles which have been declared in His Majesty's Courts of Justice to be fraudulent in every particular detail of their claims. Surely the police need have no hesitation in proceeding against advertisers who have been thus condemned in set terms by the highest legal functionaries in the Kingdom. Yet such advertisements—whole columns of them—may be seen in newspapers owned partly or wholly by peers of the realm. Possibly the view of the Home Office is that persons who can afford to throw their money away on such transactions do not deserve protection. That attitude may be an excuse for official inaction, but it is no justification, and it has now been abandoned as regards the palmists. Moreover, it would be based on false assumption, for the patent medicine traffic makes its ill-gotten gains largely from the poorer classes of society. The fact is that the Home Office appears to have sunk into a sort of official slough of lethargy, from which it emerges only under the stimulus of some public scandal such as the detention in prison of a man after proof that he has been wrongfully sentenced. Convincing testimony of the ineptitude of the Home Office is to be found in the lack of prosecution of notorious offenders whose frauds have been repeatedly exposed in the public Press and whose names appear in "cautionary lists" revised and brought up to date from time to time.

The late Dr. Walter B. Cheadle and the "C.P.R."

A CORRESPONDENT has written us pointing out an error in the recent obituary notices a few days ago of his late friend, Dr. Reginald Thompson, who, it was stated, travelled across Canada with Lord Milton along the line which later was taken by the Canadian Pacific Railway. As he knew Lord Milton intimately, and was in Norway with him some time after he had made his Canadian journey, he is able to state that Dr. Thompson was not his companion on that trip, but Dr. Walter B. Cheadle, later Physician to St. Mary's Hospital, who died two years ago. Dr. Cheadle was a friend of Dr. Thompson's, and when Lord Milton made his first trip away for the sake of his health, it was with the late Mr. J. W. Clarke (Registrar of Cambridge University in his later years) and Dr. Thompson in the *Skylark* to Iceland. Dr. Thompson introduced Dr. Cheadle when Lord Milton wanted to start again, as he himself was married and could not go, and the book written by Lord Milton and Dr. Cheadle gave an account of their journey. When Dr. Cheadle married he asked our correspondent to go to Norway with Lord Milton, for Thompson, Cheadle, and the writer were all St. George's Hospital men, Cambridge M.D.'s, and intimate friends. We agree that it is only fair to the memory of Dr. Cheadle to keep his name clearly connected with that Canadian journey which has become of so much interest and importance in connection with that vast modern enterprise, the Canadian Pacific Railway.

Skin for Sale.

THE voluntary sacrifice of a portion of the integument of a healthy person in order to help in closing the breach in the cutaneous surface of another is an act of heroism that does not often receive publicity. In cases of severe burns, for instance, where skin-grafting is necessary and it is not possible to take a fresh piece of skin from the patient himself, relatives, friends, and even medical men and nurses have frequently parted with fragments of their own dermal tissues in the cause of humanity. The idea of placing a market value upon human skin for the purpose of grafting happened to strike a destitute individual who called in at the Bradford Royal Infirmary the other day with a view of making some capital out of this variety of self-mutilation. The price demanded for a foot of his skin is not stated, though it appears that the man was in earnest about the proposed transaction. Unfortunately for his pocket, his offer was not accepted, there being no case in the infirmary that needed skin-grafting. No precedent, in the shape of a scale of fees for the removal of so many square inches of skin, has therefore been established, and it is unlikely that such dealing in human hides will ever become a popular mode of making a living. It is said that the man in question was a journalist, and, doubtless, if he had been successful in this new line of business, a thrilling account of his experiences, bearing just the necessary personal touch, would have enriched the popular literature of the day. Perhaps even now it is not too late!

The Antiquity of Judicial Hanging.

IN a paper read before the British Association Dr. Wood-Jones presented a study of the lesions caused by judicial hanging in Roman times. During the first season's work of the Egyptian survey of Nubia there was unearthed a series of bodies showing the effects of various forms of violent death. One man actually had the rope round his neck, and a very large number showed a curious lesion of the base of the skull, which was diagnosed as being caused by hanging. Dr. Wood-Jones stated that when skulls of criminals were examined in museums, it was found that this lesion did not exist in men known to have been "hanged." Methods of hanging had been changed from time to time. "Hanging" may imply (1) the hanging of a corpse, (2) the hanging (strangulation) of a living being, (3) or the dropping and hanging used to-day as the form of judicial death in England. The abolition of the old method of strangulation in favour of dislocation by the long "drop" marked a great scientific advance in judicial hanging.

LEADING ARTICLES.

TRUTH ON THE "MEDICAL TRIBUNAL."

THAT doughty journal *Truth* has for many years discharged its self-assumed task of censor of the public morals with zeal and assiduity. In spite of manifold errors, faults and inconsistencies, we are glad to believe that its influence has been on the whole exercised in the best interests of society. One of the attractive points about its earlier editorial methods was the logical way in which its views were presented, so that the reader could see at a glance the premisses upon which any given conclusion was based. Any other method in an aggressive journal whose mission demands not a little of the swashbucklering style must rapidly and infallibly degenerate into mere abuse. It is with some regret we have noted that since the wholesome control of the late Mr. Labouchere has been withdrawn from the journal in question there has been a strong tendency to drift into the tone of abusive and unsupported assertion so closely associated with the altercations of Billingsgate. An example of this sort of vituperation is to be found in the issue of September 25, 1912, which contains an article from the pen of "Scrutator" on "The Case of Dr. Axham." Almost at the outset of the article we are favoured with a sharply-etched outline picture of ourselves as seen by *Truth*. "A professional journal," the passage runs, "called the MEDICAL PRESS, which has a reputation for the most narrow-minded kind of professional animus, published the other day a malicious and spiteful attack on Dr. Axham, which could only inspire profound disgust in everybody who read it." As the statements about our mental limitation and the effects of our article are unsupported by further proof of any kind whatever, the passage as it stands represents a fragment of scurrilous abuse unworthy of a journal professing great aims and adopting a superior moral tone. *Truth* does not see the matter of Mr. Axham's offence as it is seen by the medical profession, but sheer abuse of a medical journal does not advance the argument one way or the other. The legislature has given medical men the right to determine what is or is not infamous conduct, and to deprive any practitioner of his qualification to practise should he transgress the limits of their definition. Mr. Axham deliberately defied those regulations by administering anæsthetics for an unqualified person, and has now to pay the penalty. The fact that *Truth* regards the medically unqualified person concerned as one upon whom the gift of skilled surgery had descended in some special way in no way alters the offence of Mr. Axham. The law recognises only one sort of medical practice, and in the present stage of modern surgery it is inconceivable that any special manipulative knowledge could exist for any length of time outside the range of its orthodox operators. The same issue of *Truth* contains another article by "Scrutator," in which he rejoices over "A Free Fight amongst Fat Quacks," whose claims he pulverises in the trenchant fashion first made popular by the late Mr. Labouchere. It seems clear, therefore, that the editorial mind classifies unqualified medical practice into the sheep and the goats, for here in one article he upholds "manipulative surgery," or bonesetting, while in another he implies untold anathema on "fat quacks." With regard to the latter, he says, "It is a pretty quarrel, and I trust the next round of the fight will be fully reported by the public press, regardless of the advertising departments." The innuendo thus boldly delivered makes one think of Mr. Eugen Sandow and Mr. Barker, two medically unqualified persons, who profess to cure many human ailments, and who have in past times been more or less hospitably treated and encouraged in the columns of *Truth* itself. How far is the success of these two individuals attributable to newspaper advertisement? On the strength of the sad case of Mr. Axham *Truth* urges that an irresistible case for the amendment of the Medical Acts is made out. The remarkable statement is added that, "There is no other case in which a professional authority possesses legal power to inhibit a man from the further practice of his profession without appeal to the law courts." We had imagined that absolute powers of suspension were vested in the professions of the law, the church, the army and the navy, and that in each of these, moreover, there existed absolute power of prosecution of those falsely assuming the *rôle* of authorised practice. We agree with *Truth* that an irresistible case exists for the reform of the Medical Acts, but we differ in holding that the interests of the public demand defence against the practice of ignorant and unqualified pretenders as well as against the newspapers who publish their advertisements and participate in their ill-gotten gains.

THE WORK OF THE METROPOLITAN ASYLUMS BOARD IN 1911.

The annual report of the Metropolitan Asylums Board for 1911 has recently been published, being the fourteenth year of issue. There is much to interest the medical reader within the now familiar orange covers of this volume. Regarding the work of the Board as a whole, the past year has been marked by two events of considerable importance, one being the transfer by the Local Government Board in November last of the casual poor of the Metropolis to the care of the Asylums Board, and the other the adoption of a new scheme for the accommodation and classification of the mentally defective. The reports made by the Children's Committee to the Board from time to time have prepared the way for the more general recognition of the facts that, as a general rule, these feeble-minded individuals can never be sufficiently improved by the most careful training to take their place as ordinary citizens, so that, therefore, the community must be ready to undertake the burden of their care. Furthermore, there has been a good deal of overlapping between the cases classed as imbeciles and those that are merely feeble-minded by what has often been the accidental circumstance of certification. The work of the industrial colony at Darenth has been most encouraging, and now that the unimprovable imbeciles are to be removed therefrom, the future of this establishment bids fair to be even brighter. The total number of institutions under the Board, in addition to the casual wards, is now 46, and the area of the district served is 121 square miles. It is significant to note that both the amount and the dose of diphtheria antitoxin show a considerable increase upon the corresponding figures for the previous year, so that for this disease, at least, the merits of serum therapy are well recognised. Only seventy cases of smallpox were admitted into the Board's hospitals, of whom eleven died. The mortality among the unvaccinated class was more than three times that of the vaccinated. An interesting section of the report is that dealing with the mistaken diagnosis of cases of infectious disease, the errors being greatest in the case of enteric fever and smallpox in the case of the Eastern Hospital, which had the largest number of cases admitted to any one institution. These facts would seem to indicate that there exists a lack of opportunity for seeing and comparing many cases of the exanthemata with non-infectious diseases. The medical supplement to the report, edited by Drs. E. W. Goodall and F. M. Turner, contains several interesting papers. Dr. Turner having experimented carefully with the Milne inunction treatment of scarlet fever, found that the method did not give absolute immunity against infection, nor was he able to see any modification in the mortality or complications of the disease. An exhaustive paper on the blood pressure in scarlet fever is contributed by Dr. J. D. Rolleston. Good results in the treatment of trachoma by carbon dioxide snow have been obtained in the ophthalmia schools.

THE FINANCIAL SIDE OF PUBLIC HEALTH.

That the success of public health work depends to a great extent on the amount of money forthcoming, is a more or less self-evident proposition. A conviction of its truth has long since been brought home to the authorities both central and local, in whose hands sanitary administration has been entrusted. Should a County or a Rural Council stint its expenditure the general health of the district under its jurisdiction must inevitably suffer to an extent which may be roughly gauged by the death-rate, and by the incidence and case mortality of infectious diseases amongst its population. Another illustration is that of the establishment of sanatoria under the Insurance Act. The agitation of a generation has failed in dealing effectively with the stamping out of tuberculosis, indeed, from the standpoint of practical State medicine it may be said broadly that society has merely grasped the fringe of the subject. At length the legislature has realised the fact that in order to face the problem effectually a vast sum of money must be spent in the special treatment and the segregation of tuberculosis patients. The principle underlying that departure is common to every branch of health administration. Not only is that the case but a certain amount of money expenditure is essential to the provision of a wholesome environment. The statistics of any great town will be found to bear testimony to that fact. The death-rate of, say, 30 per 1,000 of population living in a crowded slum sinks to 15 per 1,000 in a wealthy residential suburb. A striking case in point has been furnished in the annual report issued recently by the Medical Officer of Health of the royal borough of Kensington. The large district for which he is responsible comprises two sub-districts, North and South Kensington, which are about equal in population, but which represent broadly the two extremes of a wealthy and a poor London neighbourhood. The results are written in startling fashion in the death statistics. In the rich South folk die at the rate of 10.2 per 1,000, whereas in the poverty-stricken North they flock to their graves at the rate of 17.3 per 1,000. Children die at the rate of 103 per 1,000 in the South, as against 148 in the North. The birth-rate, on the other hand, in the South was only 10.8 per 1,000, compared with 26.3 in the North. There were last year 107 deaths from phthisis in the North, but only 48 in the South; in fact, there were only eight deaths from that cause recorded amongst "well-to-do" persons. Facts such as these show clearly that a vast deal remains to be done in order to place our public health administration upon a sound basis. Money must be spent freely in all directions needed to secure a satisfactory standard of environment for the individual citizen. Such expenditure must be regarded as a national investment to be returned in the saving to the general fund of wealth and efficiency. What is true of Kensington applies in substance and in fact to every point of the United Kingdom, urban or rural, just as it applies to every practical application of the advances made in other directions by modern medical science.

CURRENT TOPICS.

The Medical Conscience.

The medical profession of to-day inherits lofty traditions of honesty and humanitarianism from the great men who were our fathers. And as people are usually imposed upon in direct proportion to their goodness and largeness of heart, so few classes of men have done so much unremunerative work as doctors. During the present crisis there are abundant signs that the public in general hold this opinion, for it comes to some of them with surprise that the profession which has always combatted injustice to others should at last insist on justice to itself. There is nothing more nauseating at present than the cynical remark of the mere politician that he had always thought the chief end of medicine to be the healing of disease rather than personal aggrandisement, his puny mind not understanding the relation of the latter to the former. The preservation of our good name as a profession depends, however, not on the attitude of politicians or people, but on ourselves, and our reputation is more undermined by the foes of our own household than by all outside agencies. The surgeon who publicly depreciates medicine, the consultant who blames the practitioner for a fatality, the specialist who tells the patient that the treatment adopted by the family physician is just the very treatment that should not be adopted; in short, all those who try to make themselves shine by the destructive conflagration of another's reputation, lower the profession more than all the laws ever enforced. What punishment would be sufficient for the consultant who, being called to see a case in the last stages of phthisis, lifted up his pious hands to heaven as he said, "My God, if I had only been called twenty-four hours earlier!" With such as these we may mention the surgeon who operates for a fee and not for a cure or palliation; the hospital physician who fills his beds with petty cases, sent by influential people to save themselves personal inconvenience, to the exclusion of cases of urgency and of those for whom hospital treatment is essential. The sun has spots, but its general brightness is undisputed. For the sake of the illogical we must remove the spots from our profession.

Autotomy.

Through the medium of the lay Press several cases have been brought to the notice of the public in which a surgeon has performed an operation on his own person. One is inclined to attribute such a procedure to bravado, and in some instances the desire to show one's strength of mind and indifference to pain may have been a factor in the performance. We cannot, however, deny that there are several points in surgery that can be elucidated by such means. According to Professor Paul Reclus (*La Presse Médicale*, August 17th), who gives an account of such an operation by a French surgeon, M. Regnault, the chief object of "autotomy" was to demonstrate the efficiency of local anæsthesia for a herniotomy. A preliminary injection of morphia was given, and then the operative area was infiltrated with cocaine. The operation was carried out painlessly and with entire success. We cannot believe, however, that there is much of scientific value in such operations, for the value of local anæsthesia can be fully demonstrated by allowing another surgeon to perform the operation. Nor is the performance of such an operation on oneself an entire novelty; we have simply forgotten the other cases reported. There is, indeed, an authenticated case of a blacksmith who had undergone a perineal cutting operation for stone in the bladder. There was a recurrence of the symptoms, so the patient asked his brother to hold up his scrotum, and assuming the lithotomy position pushed a knife along the track of the old wound into the bladder, removed the stone and made an uneventful recovery. There can be no doubt, however, that surgeons would gain much if they realised, as did M. Regnault, the use of local anæsthesia. In an emergency, given a surgeon and some novocaine tabloids, no patient should die without an attempt being made to relieve his condition.

The Redemption of the Inebriate.

One of the papers of greatest practical interest to our profession, read at the recent meeting of the British Association, was that contributed by Dr. David Heron, Assistant Professor of Eugenics, in University College, London, on "The Reformatory Treatment of Inebriates." He gave particulars of the records of over 1,900 inebriates who had undergone treatment and had been kept under observation for a year. Of these only 331 could be said to be doing well or to have reformed. Even this small number would have been considerably reduced had all the inebriates been under observation for periods long enough adequately to test the permanency of reform. The one fact that dominated all others was the amount of mental defect among inebriates. Dr. Heron holds that all the available evidence goes to show that the mental defect precedes instead of being the result of the alcoholism, that, in fact, inebriety is more an incident in the life of the drunkard than the cause of his mental defect. Dr. Heron urged that the only remedy for at least two-thirds of the existing extreme alcoholism was the permanent segregation of the mentally defective child from school age onwards. This subject has been dealt with frequently in the Medical Press during late years. The cases where inherent mental defect is at the root of causation no doubt form a large percentage of incurable cases; but in a large number the incurable alcoholic habit must be ascribed to the degenerative effects upon the brain and nervous system brought about by prolonged and excessive use of intoxicants. The causation of inebriety is frequently extremely complex, and nothing can be more absurd than the claims of quacks who profess to cure every class of case by drugs and secret remedies. One of these "cures" is still being carried on by a philanthropic society, which numbers among its members, dignitaries of the church, ministers of religion, magistrates and newspaper editors.

A Travelling Scholarship in Dermatology.

One of the most important assets of the modern specialist is his knowledge of the various methods adopted by the recognised leaders of his branch in different parts of the world. In the splendid isolation of his own clinic he can put each new and vaunted remedy to the test, thoroughly sifting the results claimed for it by other observers. If he has been fortunate enough to visit the principal foreign clinics, he will have learned first-hand many invaluable "tips" and secrets belonging to his speciality, otherwise he must remain content to read the foreign journals for himself—a poor substitute, it must be confessed, but nevertheless indispensable if he would keep himself abreast of the latest developments of medical science. To the prospective consultant, fresh from the schools, nothing can be of greater service than a tour round the Continental clinics before finally settling down as a specialist at home. Nothing could have been more happily chosen to perpetuate the memory of the late Dr. Radcliffe Crocker, for thirty years physician for skin diseases to University College Hospital, than the generous gift of £1,500 made by his widow in order to endow a travelling fellowship in dermatology in connection with the hospital. This scholarship, which carries with it a gold medal, will, we understand, be awarded every five years, and there is sure to be keen competition among budding skin specialists of the future to associate themselves with the memory of one of the most distinguished exponents of dermatology that this country has ever seen.

PERSONAL.

Major F. Kiddle, R.A.M.C., has been appointed a Specialist in Ophthalmology at Colchester.

Dr. E. H. Stancomb has been adopted as the Labour candidate at the next Parliamentary election at Southampton.

Dr. Herbert Bruce Low, M.D., Ch.B.Edin., has been appointed Honorary Assistant Physician to the Children's Hospital, Sunderland.

Dr. Arthur J. Hall has been appointed Dean of the Faculty of Medicine in the University of Sheffield, in the place of Prof. Beattie, resigned.

Mr. Herbert Chitty, M.B., M.S.Lond., F.R.C.S. Eng., has been appointed an Assistant Curator of the Pathological Museum of the University of Bristol.

Mr. Douglas Rodger, M.B., Ch.B.Vict., F.R.C.S. Edin., has been appointed whole-time Ophthalmic Inspector of Schools to the Queensland Government.

Sir Rickman J. Godlee, Bart., P.R.C.S., will distribute the prizes at the Royal Dental Hospital, Leicester Square, on Tuesday, October 22nd, at 5 p.m.

Miss C. L. Houlton, M.B., B.S. Lond., has been awarded the Dr. Edith Peachey Phipson Post-graduate Scholarship at the London (Royal Free Hospital) School of Medicine for Women.

Dr. Daniel Kennedy, of Nordrach-upon-Mendip, has been appointed temporary Consulting Officer and Medical Adviser to the County of Somerset, in connection with the administration of sanatorium benefit.

Sir James Goodhart, Bart., M.D., LL.D., will receive the guests at the forthcoming meeting of the Pupils' Physical Society, which will take the form of a Conversazione, on Friday, October 4th, at 8.45 p.m.

Dr. Herbert Rhodes will open a discussion on "Alcoholism and Tuberculosis" at the meeting of the Society for the Study of Inebriety to be held on Tuesday, October 8th, at 4 p.m., at 11 Chandos Street, W.

Sir Bertrand Dawson, K.C.V.O., Physician to the London Hospital, will preside at the annual dinner of the Continental Anglo-American Society on October 12th, at the Majestic Hotel, Avenue Kléber, Paris, at 7.30 p.m.

Dr. T. Wardrop Griffith, F.R.C.P., Professor of Medicine in the University of Leeds, delivered the Schorstein Memorial Lecture on "Some Cardiac Problems" yesterday at the London Hospital Medical College.

Prof. Simon Flexner, of the New York Rockefeller Institute, will deliver the Huxley Lecture at the Charing Cross Hospital Medical School on October 31st, on "Recent Advances in Science in Relation to Practical Medicine."

Dr. H. R. Dean, M.A., M.D., has been appointed to the Joseph Hunter Chair of Pathology in the University of Sheffield, *vice* Prof. J. M. Beattie, who has been appointed to the Chair of Bacteriology in the University of Liverpool.

Surgeon-Major John Fitzgerald, of Caragh, Co. Kerry, late of the Indian Medical Service, who died on June 25th, aged 75, left personal estate in the United Kingdom valued at £13,821, of which £7,291 is personal estate in England.

Dr. J. Tate Creery, the well-known Medical Officer of Health of Coleraine, was the recipient last week of a handsome gold watch and a substantial cheque, as a token of the esteem and affection with which he has been regarded by all classes of the community during the last thirty years of zealous and efficient service in the district.

FRENCH CLINICAL LECTURE

ON

PNEUMOCOCCAL MENINGITIS.

By DR LAFFORGUE,

Medecin-Major (premiere classe); Professor, Val-de-Grace.

[Specially Reported for this Journal.]

The meningitis which results from pneumococcus invasion (pneumococcal meningitis) has already had an extensive history, clinical and bacteriological. It owes to the important memoir of Netter ("De la méningite due au pneumocoque, avec ou sans pneumonie," *Archives de Médecine,* 1887) the position which has ever since been assigned to it in nosology. A number of subsequent investigators—German, American, Italian—have contributed to make it known; and the researches in France of Boulay (*Thèses de Paris,* 1890-91), of Hutinel (*Semaine médicale* 1892), of Grasset (*id.,* 1894), and of Scherb (*Thèses de Montpellier,* 1894-95) deserve special mention here. Nevertheless, it was until within the past few years frequently confounded with cerebro-spinal meningitis. But pneumococcal meningitis has re-established its definitive autonomy in proportion to the increased precision of the identification of the meningococcus. And at the present date it appears to us as an affection which is clearly individualised, and readily lends itself to nosological description. Following the example of Netter, we are here dealing separately with the meningitis which is associated with pneumonia, and that which is independent of every pulmonary influence. In addition, we reserve a place in our study of the subject for certain meningeal conditions which have arisen in the course of pulmonary pneumococcus invasions, and to which the term meningitis would not duly apply. These we propose to study under the heading of *parapneumonic meningeal pneumococcosis,* so as to indicate simultaneously their necessary differentiation from cases of meningitis, properly so-called, and their habitual coincidence with a pulmonary process.

A. *Pneumococcal Meningitis Associated with Pneumonia.*—Here there are three eventualities possible: (1) The precedence of the pneumonia—which may be from a few days to (a maximum of) three weeks; (2) the simultaneous appearance of both affections; (3) the precedence (or apparent precedence) of the meningitis. The following considerations apply to all these three cases, without much variation.

I.—Ætiology and Pathogeny.

The proportion of cases of pneumonia that are complicated with meningitis is very variable (from 0.13 to 8 per cent., according to dates and localities). Two-thirds of the cases occur in the male sex. The degree of receptivity reaches the maximum at the two extremes of age: in the first year of infancy, and among old people after the age of sixty-five. In case of adults, the maximum is reached between forty and fifty years: overstrain of the nervous system, cerebral propathy, renal or hepatic failure, certain physiological conditions (such as pregnancy or lactation) or pathological states (such as extreme poverty, starvation, cachexia, etc.), *alcoholism* (which has been noted in more than one-third of the cases)—these are the most efficient of the known predisposing causes. Among the extrinsic factors, latitude and climate are but of relative importance. But this cannot be affirmed of certain *epidemic conditions,* which are met at variable intervals, and of which the *rôle* is as manifest in its influence as mysterious in its nature. Under their influence, in regions which had previously enjoyed apparent immunity, there may be developed a very severe outbreak of pneumococcal meningitis. These may then appear in unusual proportion (in Erlangen, for instance, making 8 per cent. of the cases of pneumonia), after having been absent for years. This abnormal frequency of cases of meningitis habitually coincides with the occurrence of other extra-pulmonary localisations of the pneumococcus: in endocarditis, pericarditis, nephritis, etc. It is in such cases that we see pneumococcal meningitis spreading in epidemic form, like pneumonia itself. Usually circumscribed by conditions of habitation—in single families or grouped collectively (as in barracks, convents, schools and prisons)—these epidemics sometimes extend to a whole village, or town, or city. They rarely spread further, and in this way they differ in course from epidemics of cerebro-spinal meningitis, from which they are further distinguished by less tendency to reappearance in successive years. Instead of the regular and almost rhythmic recrudescences which characterised the epidemics of cerebro-spinal meningitis in the 19th century and the beginning of the 20th, they have presented but rare epidemic manifestations, and those separated by long intervals (focal centres appeared in Prussia, Saxony and Silesia in the period which ranged from 1863 to 1868; Italian foci appeared later at Turin and Milan, and the New York epidemic in 1873). On the other hand, an habitual feature of pneumococcal meningitis is the appearance of sporadic cases, not grouped, which display themselves side by side with epidemic cases of cerebro-spinal meningitis in such a way that clinical history alone would be insufficient to distinguish one from the other. Many cases of this class occurred in 1898, 1899 and 1900. This interesting fact seems to prove that the circumstances—probably external—which govern the affinity of the meningococcus or pneumococcus for the meninges are either identical or closely allied.

What, then, is the pathogeny of pneumococcal meningitis associated with pneumonia? According to the explanations (notoriously insufficient as they now are) of Gubler, there have been successively incriminated: venous stasis of the brain (Verneuil), reflex influences transmitted by way of the sympathetic (Laveran), and embolic matastases (Lancereaux). This last-mentioned author attributed the meningitis to emboli detached from the endocardium. But, as a matter of fact, endocarditis is absent in two-thirds of the cases of pneumonia which are complicated with meningitis. It is nevertheless probable that the embolic theory of Lancereaux applies accurately to some cases. Salvy maintained that the meningitis should be regarded as a pyæmic localisation, as it always coincided with the occurrence of pulmonary suppuration. But in a series of 120 cases analysed by Netter, suppuration of the lung was found but in 17—that is to say, in 14.17 per cent.

It is necessary to hold definitely to the thesis which was so brilliantly sustained by Netter in 1887, and was based by him on decisive demonstration, that: *the passage of the pneumococcus into the cerebro-spinal fluid is the causal factor of the meningitis.* The proposition is now trite, indeed; but at the date of its enunciation it represented a very advanced view. By 1878, Professor Grasset had enunciated the opinion that in cases of duplex localisation, pulmonary and meningeal, we had to deal with "a duplex manifestation of the same cause." And this proved to be a clinical intuition of the most exact and suggestive type, which came to be demonstrated bacteriologically by Netter. The pneumococcus may attack the meninges by one of two different routes—(1) starting from the pharynx (Cornil), the nasal fossæ or sinuses (Netter, Weichselbaum), the tympanic or labyrinthine cavities (Netter), where it colonises normally in case of pneumonia, the germ passes into the meninges, either along the blood-vessels or lymphatics or the lymph-sheaths of the nerves; (2) the pneumococcus may pass directly from the general circulation into the cerebro-spinal fluid. Thus we have two pathogenic mechanisms, either of which is able to account for the invasion of the meninges—that of a *local infection* passing on from one stage to another, and that of a *general infection*—a *septicæmia*—with selective localisation in the meninges. Netter is inclined to believe that the latter is the more usual mechanism. But our recent additions to knowledge of the course of primary pneumococcic septicæmia do not tend to corroborate this view.

II.—Symptoms.

The initial pneumonia presents symptoms and habitual signs. In this connection three remarks must be insisted on—(1) the process in the lung does not always take on the classic type of lobar pneumonia; the types of pulmonary congestion, of spleno-pneumonia, of bronchitis, etc., are sometimes observed. (2) Not infrequently the lesion is located in the apex. (3) The period of invasion of these pulmonary lesions conveys frequently some symptomatic peculiarities which would seem to indicate the influence of a precocious meningeal reaction: violent headache, photophobia, retro-cervical pain, *vomiting*.

The symptoms of the meningitis properly so-called vary according to whether the process does or does not engage the whole extent of the surface of the cerebro-spinal axis; whether it predominates over the convexity—which is the rule—or affects to an equal degree the various areas of the surface of the brain, etc. In basing a classification on the features of evolution we may distinguish *four* clinical types:—

(1) *Hyper-acute, or Apoplectiform.*—This is the most interesting of the types, because the development is insidious, and it lends itself to errors of prognosis which are almost inevitable. The meningeal complication may appear either in the course of the pneumonia, or after the resolution of the latter has been completed. The following note of one of our own cases is an example of the parapneumonic type:—

X was admitted to the Val-de-Grâce, 18th February, 1911; after an illness of some days. The onset had been marked by a rigor, without localised pain in the side; accompanied by cough and sanguinolent sputa, and very severe headache with photophobia and vomiting. On admission, he was found to be the subject of pulmonary consolidation of the lower lobe and a portion of the middle lobe, on the right side. At that period the meningeal signs were so far defaced that, except for the suggestive ones referred to (headache, vomiting) attention would hardly have been attracted to the meninges at all. Lumbar puncture drew off a limpid fluid, which flowed without showing tension. Microscopic examination, after centrifugalisation, failed to reveal a *microbe of any kind;* but, on the other hand, there was a *very pronounced* and *almost pure lymphocytosis.* Cultures proved sterile. Precipitin reaction was negative.

Next day the patient's condition remained the same. But, in the course of the succeeding night, the meningeal syndrome established itself with extreme brusqueness. The patient lost consciousness; uttered unintelligible phrases; displayed extreme agitation; the face was of earthy hue, the nose pinched, the facial muscles twitching, the eyes rolling in the orbits. Myoclonic shocks passed through the upper limbs. Kernig's sign, which had been absent in the evening, became very distinct; rigidity of the nucha was very marked; the abdominal wall was retracted; the vomitings were repeated; incontinence of urine and of fæces appeared; and the oculo-pupillary reflexes were but little modified. There was no local paralysis. Another lumbar puncture yielded a very suspicious-looking fluid, which contained numerous pneumococci and polynuclear corpuscles. Death occurred in the course of the day. The autopsy displayed the typical lesions of pneumonia, and of a meningitis which extended along the whole length of the spinal column, and without any other noteworthy visceral lesions.

Netter's memoir gives the history of a case of a metapneumonic meningitis which belonged to the same evolutionary type as the above. An insidious development of meningitis on a gross scale, very rapid and fatal evolution—with a symptomatology almost dramatic in intensity—such are the principal characteristics of the apoplectiform type. It should be observed that, in our case, the cytology permitted from the onset the suspicion of the approach of a meningeal complication; nevertheless it was but a slight presumption, having regard to the fact that lymphocytosis is a familiar phenomenon in the course of the most varied infections and intoxications. Also, this apoplectic variety is sometimes complicated with hemiplegia, aphasia, etc.

(2) *Acute.*—This is the most usual form; in this case the meningitis develops progressively, and reaches its acme in the course of some days. As the lesions are most pronounced on the convexity, the headache is very pronounced and appears at an early stage; and Kernig's sign, which is nearly constant, indicates the habitual participation of the spinal meninges. We again note the rigidity of the nuchal muscles, vomitings, delirium, incompetence of the sphincters, varied modifications of the oculo-pupillary reflexes. Paralyses of the limbs are exceptional; those of the cranial nerves are less rare—particularly of the facial and auditory—especially when the exudate has been very copious at the base.

(3) *Sub-acute.*—Here the meningeal syndrome is but very slightly developed, and runs a transitory course. It is to cases of this type that the epithet of *meningism* has long been applied. Many of them are related to the parapneumonic meningeal pneumococcosis, which is described below; their course and evolution are favourable.

(4) *Chronic.*—Does a chronic type really exist—that is to say, acute meningeal lesions naturally evolving towards a cure? The occasional cases which have been indicated do not carry with them a degree of absolute conviction; the lumbar puncture not having served as criterion to the diagnosis. Those cases of spontaneous cure belong, possibly, to genuine cerebro-spinal meningitis.

III.—Pathological Anatomy, Cytology, Bacteriology.

The pulmonary lesions vary in intensity. Of 120 cases which were collected by Netter, there were 3 of pulmonary abscess, 14 of purulent infiltration, 25 of gray hepatisation, 18 of red-gray hepatisation; the remainder conformed to the type of ordinary pneumonia, or of correlated inflammatory neuropathies. They are frequently accompanied by vegetative endocarditis (one-third of all the cases), by fibrinous, or fibrino-purulent, pericarditis, or by pleurisy.

With regard to the meninges, we find an exudate—yellowish, viscous, fibrinous, and very richly abounding in micrococci—most conspicuous on the cerebral convexity, and more especially along the course of the vessels. It is also present on the basal surface, and on both aspects of the cerebellum; but there is, as a rule, less coherent and compact than on the convexity. The exudate is incorporated with the meshwork of the pia mater; which latter structure, on the other hand, is easily detachable from the surface of the brain. The cerebral ventricles are specially affected; the intraventricular liquid is more abundant than in the normal state, and contains small clots of fibrin held in suspension. The choroid plexus forms a continuous fibrino-purulent mass. The spinal meninges are involved in the majority of cases. Netter says, in one-third; but the systematic statistics of autopsies of the spine have displayed the existence of a much higher proportion. It is even probable that no pneumococcal meningitis develops without involving in its attack the whole of the cerebro-spinal axis. It is true that the lesions display varying degrees of intensity, according to the stage of development and the locality; they are specially pronounced at the level of the cervical and lumbar enlargements; they are present in those situations under the aspect of a continuous fibrino-purulent stratum; at least, on the posterior aspect of the pia mater—the anterior portions of this membrane are relatively spared by the disease—and, besides, they display along the vessels milky streaks, or yellowish non-coherent bands; and, again, in other cases there may be but a simple vascular injection—hyperæmia without exudation.

To these histological lesions correspond *modifications of the cerebro-spinal fluid,* which are revealed by lumbar puncture:—

(1) *In the initial period,* this liquid undergoes but slight modifications: (*a*) its appearance is often limpid, or but slightly turbid; (*b*) the increase of tension may be slight or even nil; (*c*) microbes may be undiscoverable by direct examination, or even by culture; (*d*) the leucocytic reaction may be absent, or appear only at wide intervals (polynuclear lymphocytosis, or of the intermediary formula).

(2) *In the period of full development,* lumbar puncture brings off a liquid at high or medium tension, turbid or purulent, of a pale yellow or bluish tint, and variable consistence—sometimes viscid. This fluid is highly albuminous, contains fibrin in abundance, and rapidly presents a copious coagulum; this is sometimes even completely formed within an interval of ten or fifteen minutes after the puncture. Microscopic examination, made before, or better after, centrifugalisation gives results which are nearly constant as regards bacteriology, but very variable in respect to cytology. Bacteriological examination reveals the presence of pneumococci in variable quantity; usually, however, in great numbers; free, or enclosed in leucocytes; the majority presenting typical characteristics, and some under the aspect of degenerate forms, more or less refractory to Gram's stain. From the cytological point of view, the results are much more variable; sometimes—indeed in the more usual type of case—we find readily presenting itself in evidence a typical formula of polynucleosis (polynuclear cells, both intact and degenerate); sometimes, again, the polynuclear cells are much less numerous, and centrifugalisation is indispensable in order that the examination of the clot should reveal the formula of classic polynucleosis (A. Mery and Partunier). Finally, in other cases, leucocytes are completely absent; and we find ourselves in presence of this *paradoxical* formula: *abundant pneumococci, sometimes in pure culture, without any associated cytological elements.* Instances of the occurrence of cases in which the cerebro-spinal fluid of pneumococcal meningitis is either void of, or extremely poor in, cellular structures are not rare (Menetrier and Aubertin, Achard and Ramond, Guillemot and Ribadeau-Dumas, Castaigne and Dobré, Ch. Lesieur, Froment and Garin, Guillain and Cl. Vincent, etc.). They have elicited variously divergent pathogenic interpretations. According to some authors, the cause lies with the chemotaxis. When the pneumococcus is but slightly virulent, the organism is but lazy in defending itself; hence the leucocytic afflux is either nil, or small in quantity. But when the microbe is highly virulent, its secretions repel the leucocytes and extinguish their vitality; hence paralysis of the cellular defence, and extreme poverty of the liquid in leucocytes. According to Professor Widal, however, the mechanism is wholly different: in the spinal canal itself, there occurs a *precipitation*—a *retraction*—of the fibrin comparable to that which takes place *in vitro;* and the coagulum so formed envelopes the leucocytes which, by virtue of that fact, disappear almost completely from the surrounding liquid. The results of a puncture made in the case of one of our patients go to support the idea of the pathogenesis which is maintained by Professor Widal. On account of an operative incident, the procedure took place in two sittings at an interval of three hours. In both portions of the fluid evacuated, an *abundant supply of pneumococci* was evident; but, while the first portion was *extremely fibrinous,* and *extremely rich in polynuclear cells* which were *nearly all involved in the coagulum,* the second portion was almost *completely free from fibrin and leucocytes.* How explain these differences, after an interval so brief? We can hardly admit that it was merely due to a simple chemotactic variation. And if this explanation appears applicable to the case of the leucocytes, it surely cannot be applied to the fibrin. Thus, it is more plausible to admit that unknown factors (involved in the operative traumatism, effusion of blood, etc.) created conditions favourable to precipitation and retraction of fibrin. This is, at least, a plausible hypothesis—regarding an interesting question which is still a disputed one.

With regard to the cytological point of view, we are now able, in bringing our own personal observations into juxtaposition with those which had been previously published, to present in the following table the several leucocytic formulæ of pneumococcal meningitis:—

(a) Polynucleosis.

(b) Lymphocytosis: initial, transitory, and rapidly followed by polynucleosis (cases observed by Triboulet, Ribadeau-Dumas, Menard, and ourselves);

(c) Absence of leucocytic reaction.

IV.—Differential Diagnosis.

Meningitis co-existing with pneumonia is liable to be confounded with one of various pathological states. The following are some examples:—

(a) Tuberculous conditions (caseous pneumonia, for instance), complicated with the final granulation process.

(b) Pneumonia complicated with cerebral phenomena attributable to hæmorrhage, cerebral or meningeal; to cerebral embolism, cerebral abscess, thrombosis of the sinuses, etc.

Clinical examination will here assist in forming the diagnosis; but, in order to eliminate meningitis with certainty, it is necessary to have recourse to the lumbar puncture. The same observation, and same precept, must be regarded when distinguishing pneumococcal meningitis *from every other variety of active meningitis* (here including even tubercular meningitis). Clinical observation furnishes us with presumption only; bacteriological examination of the cerebro-spinal fluid leads us to certainty. This includes the following series of operations:—

The liquid derived from the lumbar puncture should be divided into three portions—one destined for direct examination, one for cultures, and the third for inoculations. All must be received aseptically in sterilised tubes.

(1) *Direct Examination on Slides.*—This may be applied in case of the total mass of fluid, or to the deposit obtained by centrifugalisation. Examination of the original mass of fluid suffices, as a rule, for bacteriological diagnosis; examination of the deposit after centrifugalisation is indispensable to determination of the cytological formula. Centrifugalisation should be carried out some minutes after the puncture, for in liquids in which pneumococci are present a fibrinous coagulum is very rapidly formed, which involves in its meshes nearly all the leucocytes. If the centrifugalisation must be postponed, the liquid may be defibrinated at once by placing it in a receiver containing glass beads. In the positive cases, direct examination will reveal: (1) Diplococci in lanceolate arrangement, encapsuled, and taking the Gram stain; (2) a cytological formula of polynucleosis (70-90 per cent. of polynuclear cells). We may have different results in all of the early phases of the meningeal process: (*a*) Absence of microbes; (*b*) lymphocytosis. This is, however, soon replaced by polynucleosis.

(2) *Cultures.*—These may be carried out with specimens of the general mass of liquid (when the germs are numerous) or of the deposit (when they are few in number), on the various media usually employed; and also, in addition, on *serum-broth* and *ascitic jelly* when available. In case of the pneumococcus, the culture on the latter (in form of dewdrops) should be characteristic of this microbe. In the cases which prove difficult of identification we may utilise all the various other complementary methods of culture; these may be adapted to the characters of the germ which were made manifest in the previous cultures.

N.B.—In preparing for the broth culture is is well to dilute the cerebro-spinal fluid with large quantities of the medium (to a tenth, or so).

(3) *Inoculation.*—This may be practised subcutaneously on the guinea-pig (¼-½cc.) or the rabbit (2cc.). When dealing with the pneumococcus, death by

septicæmia takes place after an interval of twenty-four to seventy-two hours. The microbe multiplies in the blood. We can always identify it absolutely by appropriate cultures made with blood taken from the heart.

N.B.—When the germs are proportionally few, the inoculations should be practised with portions of the deposit diluted in physiological serum.

(4) The preceding modes of examination should be finally supplemented by application of the *precipitin* reaction of H. Vincent; this gives a negative result in cases of pneumococcal meningitis.

V.—Prognosis.

The prognosis of a case of pneumococcal meningitis cannot be based upon clinical evidence alone. In fact, if the acute and hyper-acute cases are almost surely fatal, we have seen apparently very grave cases recover—which seemed, indeed, at first to be destined to the same fatal evolution. It is quite true that in some of these, in absence of the lumbar puncture, some doubt may be cast on the legitimacy of the diagnosis. The prognosis should be founded on a double basis—that of the clinical condition, and that of the bacteriological examination of the cerebro-spinal fluid. When the latter displays abundant microbic proliferation, the fatal result is assured. And the only cases which would appear to be curable, whatever be the apparent gravity of the clinical tableau, are those in which the meningitis is of the purely circulatory, or but very slightly exudative, type; when the anatomical process is still compatible with recovery (Grasset). These cases correspond to a proliferation of the pneumococcus of slight relative proportion—so slight that Belfanti, not being able to demonstrate its presence, incriminated the toxins of that microbe—and such that special artifices are necessary to discover it at the time.

VI.—Treatment.

This may also be very deceptive at the time of the full development of the clinical conditions. The usual sedatives may be employed to allay the symptoms of excitement. The use of the warm bath at 40 deg. (104 deg. F.), every three hours, and the lumbar puncture every day, continue to form the principal basis of the treatment. We must still wish for the discovery of a specific serum of appropriate efficiency.

B. Parapneumonic Meningeal Pneumococcosis.—There are cases in which the passage of the pneumococcus into the sub-arachnoid space does not result in the production of a true meningitis—in the anatomical and clinical sense of this term. The pneumococcus has indeed penetrated, as the culture of the same bears witness, into the cerebro-spinal fluid; but its proliferation takes place in extremely scant proportion—so scanty that direct examinations, even when carried out with the aid of centrifugalisation, do not succeed in placing it in evidence: and even culture itself sometimes proves powerless to reveal its presence, unless we have recourse to special artifices. In those cases, with the exception of a certain degree of hypertension, the cerebro-spinal fluid retains its normal characteristics; the cellular reactions are usually very slight—and, in the majority of instances, are due to a distinct lymphocytosis (R. Voisin, Lafforgue)—or even completely absent (Ch. Lesieur, Froment and Garin). From the clinical point of view, facts of this order have been included under the title of "meningism"; with rare exceptions, indeed, the meningeal symptoms are greatly reduced in number and importance. In one of our own cases they consisted merely of a violent headache, a slight degree of nuchal pain, a Kernig's sign almost obliterated and reduced to a spontaneous flexion of the leg on the thigh when the patient passed from the recumbent to the sitting position. Nevertheless, it is not rare to find the participation of the meninges in the infective process evidenced from the outset by the presence of two symptoms which are sufficiently rare in the pneumonia of the adult—repeated vomitings, and pain on pressure of the eye-balls, accompanied by photophobia. The pathogeny of those meningeal conditions appears to be superposable on that of meningitis, properly so-called.

The diagnosis of these cases is difficult enough. In order to establish its accuracy, it must not be based on the semeiological nuances above referred to; the lumbar puncture must constitute the sole decisive criterion. It is but in exceptional cases that the pneumococci will be revealed by direct examination, on slides, of the centrifugalised liquid; the germs being very few in number, it is *only by culture and inoculation* that we can be able to place them in evidence. Nevertheless, in order that the culture should be more surely positive, it will be useful to have recourse to certain artifices, of which the importance has been demonstrated by one of our own cases: (1) Large quantities of the cerebro-spinal fluid should be used for cultures (in case of one of our patients, 5 cc. remained sterile, while the culture gave a positive result with 30 cc.); (2) the cerebro-spinal fluid should be diluted with a considerable volume of the culture medium used (dilution in proportion of 1 : 10 for each examination). MM. Lannois, Lesieur and Gauthier have, indeed, shown that the cerebro-spinal fluid is a medium which often proves very unfavourable to the successful culture of microbes; thus there is, accordingly, an advantage gained by diluting it, so as to avoid its hindering influence, as a drag upon the process of evolution in presence of culture. It is indeed probable that cases of this type—which are still pretty rare in medical literature—will not fail to become more numerous if we regulate our procedure systematically according to the method described.

The immediate prognosis appears to be favourable. Is this also the case with regard to the remote prognosis? These meningeal episodes, even when apparently transitory and curable, constitute, in actual fact, a thorn and a gnawing torment for the future.

The treatment of cases of pneumonia complicated with meningism may be allowed to depend mainly on balneotherapy at high temperature. The desirability of practising lumbar punctures systematically is much more questionable; these find their principal indication in the persistence of the meningeal syndrome. And here we may appropriately recall the fact that MM. Lesieur, Froment and Garin have maintained by the verification of the existence of a masked meningeal pneumococcosis a new pathogeny of pneumonic hemiplegia. Their observation, taken in addition to that of Mouisset and Lyonnet, is of the most suggestive type.

C.—*Pneumococcal Meningitis without Pneumonia.*—The developments associated with para-pneumonic or meta-pneumonic meningitis seem to promise us to become extremely extended in connection with meningitis without pneumonia. Sometimes it is but a rigorously isolated manifestation of the infection; in other cases it succeeds to some other pneumococcal determination—endocarditis (Jaccoud), otitis (Leyden, Senger, Netter), coryza (Raymond), uterine infection (Caussade and Logre), etc. Whether primary or associated, it recognises the same pathogeny as parapneumonic meningitis; while it also displays the same clinical forms, determines the same lesions, and conforms to the same rules of diagnosis and of treatment. The labours of Scherb have demonstrated the gravity of the diagnosis in cases of the acute type. The feature which has long constituted the special interest of this form of disease is the mere fact of its existence—the fact, which has been prominently placed in evidence by Netter, that the pneumococcus is susceptible of exclusive localisation on the meninges, without any other preliminary visceral determination. Beyond this point, which is firmly established at present, we can but repeat, in connection with this subject, the considerations which have already been enunciated when considering the subject of meningitis with pneumonia.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Mr. A. A. McConnell, F.R.C.S.I. Subject: "The Decompression Operation for Cerebellar Tumour."*

ORIGINAL PAPERS.

THE CLINICAL SIGNIFICANCE OF THE ALBUMIN REACTION IN SPUTUM.

By MAURICE FISHBERG,

Visiting Physician, Tuberculosis Ward, Montefiore Home; Adjunct Attending Physician, Lebanon Hospital, New York.

The difficulties frequently encountered while attempting to ascertain the character, or the underlying pathological process, in cases which are suggestive of pulmonary tuberculosis are well known to every physician in active practice. In doubtful cases, which we meet more often than we should like, anything is welcome which may be of assistance in deciding the true nature of the disease with which we are dealing. It appears to me that the chemical examination of the sputum in cases of suspected tuberculosis deserves more attention than has hitherto been accorded to it. My experience with the albumin reaction of sputum during the last eighteen months has been so satisfactory that I can unhesitatingly recommend it as a useful adjunct in all cases in which tuberculosis is suspected, especially those in which the bacilli are slow in revealing themselves by the usual microscopical examination. Indeed, it is of frequent occurrence that while waiting for the bacilli in the sputum, valuable time is lost and the case progresses beyond the stage considered incipient.

In a previous communication by Dr. D. Felberbaum and myself, it was shown that the sputa in about 97 per cent. of all the cases of pulmonary tuberculosis react positive as regards albumin, while sputum of cases of bronchitis, pulmonary emphysema, rhinopharyngitis, etc., never gives an albumin reaction. Some cases of advanced phthisis, especially the fibroid cases, as well as some in which the disease is quiescent, occasionally give negative reaction, but with each exacerbation of the disease albumin is sure to make itself evident in the sputum. The test has become so valuable in my experience that whenever I do not find a positive albumin reaction in the sputum, especially in incipient cases, I do not hesitate to exclude tuberculosis.

The chemical examination of the sputum has been pursued for many years. In 1855 Biermer pointed out that in chronic bronchitis the quantity of sodium chloride and mucin is considerable, traces of extractives can also be detected, but albumin is never found. In pneumonia Biermer found in addition to the above also albumin and blood pigment. Albumin in large proportions was also found in sputum of pulmonary œdema, while the sputum of pulmonary tuberculosis he found presenting the same characters as that of bronchitis. Many others have discussed the chemistry of the sputum, especially Renk, Kassel, Jacobsohn, Lanz, Pankow, and Starkow. In his monograph on this subject, Wanner was the first to show that the chemical examination of the sputum is of great importance in cases of suspected pulmonary tuberculosis. His investigations led him to the conclusion that albumin is never found in cases of uncomplicated chronic bronchitis, while in tuberculosis the albumin reaction is never absent. Indeed, it was his opinion that albumin is present in all cases of inflammation of the parts from which the sputum is derived. Whenever the differential diagnosis between pneumonia and pulmonary infarction is in question, the presence of albumin in the sputum, provided there is no admixture of blood, speaks in favour of pneumonia.

This test was, however, neglected and hardly used by those who treated the most cases of tuberculosis till, in 1909, H. Roger and Lévy-Valensi, of Paris, in several articles on the subject showed that in cases of pulmonary tuberculosis the sputum never fails to give a positive albumin reaction, while in bronchitis and pulmonary emphysema, provided they are not complicated by dilatation of the heart, the albumin reaction is always negative. Roger and Lévy-Valensi in their last paper on the subject have compiled all the available data, compiling the examination of the sputum in 1374 cases by various observers showing that the albumin reaction is always positive in cases of pulmonary tuberculosis, and negative in bronchitis. Roger insists that while the absence of albumin in the sputum positively excludes tuberculosis, its presence is no positive indication of the disease, because albumin may also be found in sputa of cases of pneumonia, pleurisy, œdema of the lungs, pulmonary emphysema with cardiac dilatation, etc. On the other hand, in that large number of cases met with by all practitioners in which the differential diagnosis between bronchitis and pulmonary tuberculosis is difficult, a positive albumin reaction of the sputum decides in favour of tuberculosis.

In America there have to date been published two papers on this subject: one by Lawrason Brown and W. H. Ross, and the other by D. Felberbaum and the present writer. Brown and Ross report findings in 116 cases of tuberculosis, and arrive at the conclusion that all patients with tubercle bacilli in the sputum react positive to the albumin test in the sputum. In agreement with Roger's opinion, Brown and Ross state that a positive reaction by itself is of little diagnostic value, but when the reaction is repeatedly negative in a patient without the symptoms of acute miliary tuberculosis it is probable that no active pulmonary tuberculosis is present.

In the paper published by Dr. Felberbaum and myself we arrived at the following conclusions: "On the whole, our results do not confirm Roger's statements to the effect that in every case of tuberculosis the sputum gives a positive albumin reaction. We found some cases of undoubted tuberculosis in which careful analysis of the sputum gave negative results. In forty-two specimens of sputum showing the presence of tubercle bacilli, the albumin test was also positive. It has been our experience that the number of bacilli present in the field has no relation to the amount of albumin found by the chemical test. Some specimens of sputum showing an enormous number of bacilli had only a faint trace of albumin, which was sometimes so slight as to render it altogether doubtful whether the reaction was positive. It appears that the activity of the process has considerable influence on the intensity of the chemical reaction. In active, progressive cases the amount of albumin is greater than in quiescent or healing cases. In fibroid cases the amount is often infinitesimal, or entirely absent."

Ever since that paper was published, I have pursued this test in all the cases of tuberculosis, as well as others characterised by the elimination of sputum, both in hospital and private practice. At the Montefiore Home, where all the cases under my care are in the advanced stages of the disease, my experience has been about the same as that reported in the mentioned paper, with one important exception: I have observed that some sputa derived from undoubted tuberculous cases and giving a negative albumin reaction at one examination often react positively at a subsequent analysis. This is particularly true of fibroid phthisis, which often runs a slow quiescent course. But during acute exacerbations, albumin almost invariably makes its appearance in the sputum. On the whole, I find that over 95 per cent. of cases of pulmonary tuberculosis in the advanced stages of the disease give a positive albumin reaction.

From further experiences with sputa from 167 cases of incipient, or moderately advanced cases of tuberculosis, as well as with many more cases which were not tuberculous, I can state that in this class of cases this test is even more valuable than in the later stages of the disease. In many cases in which the diagnosis could not be determined with certainty the presence or absence of albumin in the sputum was invariably decisive. This is especially true of cases of post-grippal bronchitis or tracheitis, which are so frequently met with during the fall and winter months. They often show symptoms and signs strongly suggestive of tuberculosis, which clear up in the course of time—occasionally several months. Inasmuch as a negative microscopical examination in usually not decisive in this sort of case, anything that may help us in arriving at a correct conclusion is welcome. It has been my experience that in all these cases, when the sputum reacts negatively as regards albumin we can safely exclude tuberculosis. In several cases in which in former times I would have suggested to the patients that they had better take measures advisable in incipient tuberculosis, because the signs and symptoms they presented warranted a tentative diagnosis of this sort, I have relied on the negative results of the albumin reaction and have not been disappointed.

Forty-six specimens of sputum from cases of bronchitis and tracheitis gave negative albumin reactions. Some of these were quite puzzling, especially those which were sequelæ to influenza. But inasmuch as a negative microscopical examination is not always conclusive, the albumin test is really useful in this sort of case. From my experience I am strongly inclined to the opinion that in all these cases a negative albumin reaction decidedly excludes tuberculosis.

Specimens of sputum from six cases of pleurisy showed a positive reaction in four, all of which were pleurisy with effusion. Two cases of dry pleurisy gave negative albumin reactions, and one case of empyema also reacted negatively.

Five specimens of sputum from cases of lobar pneumonia all gave a positive albumin reaction — two rather faintly so.

Three cases of whooping cough, two in children and one in an adult, all gave a positive albumin reaction of the sputum. The case in the adult was quite interesting. The patient, a woman, was treated for several weeks by her family physician for tuberculosis. When she presented herself before me, I found physical signs of diffuse bronchitis, no tubercle bacilli in her sputum, but the chemical test gave a strongly positive reaction as regards albumin. She accidentally dropped a word to the effect that her child had been giving her trouble, as it suffered from whooping cough, which led me to make further inquiries as to the onset, symptomatology and course of her disease; this convinced me that I was dealing with a case of whooping cough. The further course of the disease was uneventful, but the albumin in the sputum persisted for about two months until the cough ceased altogether.

Twenty cases of asthma gave negative albumin reaction. Three cases of asthma with emphysema, complicated with dilatation of the heart, gave a positive albumin reaction occasionally. I am inclined to the opinion, based upon a careful observation of one of these cases, that whenever the overworked heart gets into difficulties and shows signs of failure, albumin begins to appear in the sputum, but as soon as the heart is reinvigorated through proper measures, rest, digitalis, etc., the sputum again reacts negatively. Considering the rarity of cardiac dilatation in pure asthma, it is important to remember that the albumin reaction is of great service in differentiating it from tuberculosis. Especially is this the case with that form of asthma which is often seen in furriers. Unlike the cases of essential asthma, these are quite often complicated by tuberculosis or are tuberculous from the beginning. The physical signs are those of diffuse bronchitis or of asthma, and owing to the sibilant and sonorous noises heard all over the chest it is difficult, often impossible, to differentiate them from tuberculosis by the physical signs alone. Until two years ago I relied solely on the symptomatology and bacterial findings in attempting to formulate a diagnosis in these cases. Those showing rapid loss of weight, weakness, tachycardia, night sweats, etc., as well as those in whose sputum tubercle bacilli were found, were considered tuberculous. But others were simply told to give up their work at fur. But at present I look at the albumin reaction as an aid of great importance. Whenever it is positive I do not hesitate to pronounce the case tuberculous.

The numerous rhino-pharyngitic patients who consider themselves tuberculous, and are often even admitted to sanatoria as cases of tuberculosis with negative sputum as regards tubercle bacilli are well known. In my experience sputum from these cases is always negative as regards the albumin reaction. I never hesitate in assuring the patient that he is not tuberculous when I find a negative albumin reaction.

In twelve cases of pulmonary emphysema, without cardiac dilatation, the sputum always gave a negative albumin reaction. In two cases in which the heart was giving way, and dyspnœa and cyanosis made their appearance, albumin was found in the sputum. In one of the two latter cases, which I had under observation for some time, the sputum reacted negative as long as the heart worked properly, and only when the pulse ran up to over 100 and cyanosis, dyspnœa, etc., made their appearance, did the albumin reaction become positive. To a certain extent, I am under the impression that we may, in pulmonary emphysema, take the albumin reaction as an index of the capacity of the heart.

In sixteen cases of heart disease, I found a positive albumin reaction in four; the rest reacted negative. In five cases of chronic nephritis, I found a positive albumin reaction in three.

It appears from what has been said that the albumin reaction of sputum is a useful adjunct to our diagnostic methods in cases of suspected tuberculosis. Considering that the technic of the test is so simple—anyone who can test urine for albumin can perform it—it ought to become a routine diagnostic method.

Some precautions are, however, necessary. The sputum should be collected, just as for microscopical examination, in a wide-necked bottle. It must be examined on the very day it has been expectorated, because with putrefaction the proteids are split up, especially the mucin, and liberate albumin. Especially during the summer months, sputum, just like urine, must not be examined when putrefaction has set in. Similarly, we must be careful to obtain sputum, from beneath glottis, and not saliva, which contains albumin. This is particularly true in cases of stomatitis, but many patients bring specimens of sputum which on examination is evidently saliva. These specimens are to be rejected.

The albumin test is made as follows: a three per cent. solution of acetic acid is added to the sputum, which is then thoroughly shaken. During ten or fifteen minutes the bottle is allowed to stand, and repeatedly shaken during this time. It will be observed that the mucus is coagulated by the acetic acid, and when it is then filtered through paper into a test tube, the filtrate appears as a clear fluid. Occasionally all the mucus is not coagulated with the first attempt, and this is easily ascertained by adding a drop of acetic acid to the filtrate, which in such cases again shows flocculi collecting as a precipitate. The process is then repeated, until a clear filtrate is obtained. The clear fluid is then boiled over a Bunsen burner, or an alcohol lamp, and while boiling, some crystals of common salt, or a concentrated solution of sodium chloride is added. If albumin is present there results a cloudiness, or a curdy precipitate which, on standing, settles to the bottom of the tube. Roughly speaking, the amount of the precipitate gives us an idea of the amount of albumin present. The most important precaution to be observed is that nothing but a curdy precipitate can be considered as positive, because the presence of mucus, which the acetic acid does not always dissolve completely, may also give a cloudy precipitate on boiling. But this reaction is not curdy, nor does it settle on standing. Of course, any of the other tests for albumin may be used on the filtrate, but the above procedure has given me satisfactory results.

Conclusions.

1. The albumin reaction of sputum is a useful test in cases suggestive of pulmonary tuberculosis and will often be of assistance when the microscope fails to reveal tubercle bacilli.

2. A positive albumin reaction is not always decisive, because many diseases, not at all tuberculous in character, may show albumin in the sputum.

3. A negative reaction, when repeatedly found during several examinations, from specimens of sputum carefully collected, excludes tuberculosis.

4. In cases of tuberculosis, in which the albumin reaction was positive but has become negative for

some time, we may conclude that the process of cicatrisation of the pulmonary lesion is progressing favourably, even when the physical signs are slow in disappearing.

5. The albumin reaction has a prognostic value. It gives us an opportunity to follow the progress of the tuberculous process. Whenever albumin makes its appearance in a case in which the reaction was negative for some time, there is surely to be found an acute exacerbation, or an extension of the lesion in the lung.

6. In pulmonary emphysema a positive albumin reaction appears to be an indication of cardiac dilatation, thus indicating the proper treatment to be pursued.

SUBPHRENIC ABSCESS.

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The term "subphrenic abscess" means any localised collection of pus in contact with the under surface of the diaphragm. Strictly speaking, it includes abscess of the liver, although clinically we recognise a distinction between the two. In some cases a liver abscess may become strictly subphrenic, having been originally separated by a thin layer of liver tissue, this layer ultimately undergoing absorption.

There are certain anatomical factors concerned in the formation of a subdiaphragmatic abscess which must not be lost sight of, although one feels after operating upon these cases that too much stress must not be laid upon exactly where the abscess ought to be. Roughly speaking, the space immediately below the diaphragm is divided anatomically by the ligaments of the liver, with four peritoneal compartments. These are the falciform, which divides the space laterally into two halves, a right and a left, and the coronary ligaments, stretching outwards to form the lateral ligaments, thus sub-dividing the lateral spaces into anterior and posterior compartments. In addition there are two non-peritoneal or retro-peritoneal regions between the two layers of the coronary ligaments. Now, of the four peritoneal compartments—right anterior, left anterior, right posterior, left posterior—the two posterior spaces are by far the most important. This is easily explained by the same facts, the recognition of which has led to the adoption of the semi-recumbent position and suprapubic drainage in cases of acute general peritonitis.

The pelvis and the posterior fossa under the diaphragm are the two main cavities in which are liable to collect all serous or purulent effusions in the peritoneum when the patient is lying down. The very fact that subphrenic abscess does not usually attack people in the best of health, but occurs secondarily in patients who have just partially recovered from some acute or sub-acute abdominal lesion, *i.e.*, in people who are lying down for the greater part of the day, is enough to show the part which gravity alone may play in its production.

The effect of gravity is seen also in the relative frequency of posterior location of the pus, a fact which is important to realise, because, although cases which come to the front are more easily diagnosed, those which come to the back are more easily drained. Another anatomical factor, which Mr. Moynihan would, no doubt, call the "physiology of the living," is the direction of peritoneal currents. Dr. Arthur Wallace showed many years ago, and other observers have confirmed it, that the direction of the flow in the abdomen is upwards.

As a rule the causation of the abscess is obvious, but occasionally one meets with a case in which not even the pathologist, who is allowed a much larger incision than the surgeon, can say what the primary lesion was.

In my own cases the number is too small to draw any conclusions from; but in the collection of cases on which Mr. Barnard wrote a very able paper the figures were as follows:—

Gastric ulcer	21 cases
Appendicitis	12 cases
Liver: suppurating hydatid... ...	8 cases
Liver: tropical abscess	6 cases
Duodenal ulcer	5 cases

the remaining cases being made up of one or more of the following:—Gastric cancer, liver abscess, pylephlebitis, suppurative cholangitis, splenic abscess, pyæmia, parturition, pneumonia, bronchiectasis, empyema, periostitis of vertebræ, cancer of pancreas, cystic kidney, ruptured intestine, typhoid, gall-stones, and pyosalpinx, while in two the cause was not found.

The commonest age appears to be between 20 and 30, coinciding, that is, with the commonest age of appendicitis and ulcer either of the duodenum or stomach.

The diagnosis is not easy. The history of the lesion causing it may or may not be present; and it is worthy of note that in those cases due to gastric or duodenal ulcer a history is more likely to be advanced than in those due to appendicitis. This is partly because the more serious types of appendicitis are often first attacks, and no previous attack, therefore, is recorded.

The onset is sometimes sudden and sometimes insidious, and these characteristics are so evenly balanced that the onset can be taken into account only in association with symptoms pointing to a local cause.

If the commencement of the disease is very sudden it may be mistaken for the causative lesion; but this in itself is not a disadvantage, because operation is undertaken immediately and the real state of affairs disclosed.

The general signs and symptoms vary a good deal, but the history of most of the diagnoses made is this: You first of all form an impression that pus is present in the body somewhere. Then you exclude the abdomen, the pelvis, and the thorax. Then you think of subphrenic abscess and call in a physician. The diagnosis, it is true, is in some cases so simple that the surgeon can make it himself, but in the majority of cases he is wise if he avails himself of the help of a skilled physician.

The patients strike one forcibly as being ill. They have the signs of a more or less severe toxæmia; most of them lose weight, and nearly all of them have a rise of temperature at some time or other. In many cases, however, this rise is not great, and it is worth remarking that Hippocrates recognised a fact which seems to have been lost sight of occasionally, in spite of the invention of the clinical thermometer—namely, that fever is more likely to be present during the formation of an abscess than after it has formed.

Of the general symptoms, rigors constitute the most serious single sign. There is usually anæmia, night sweats, dirty tongue, and in many cases a type of septic diarrhœa.

Abdominal Signs.—These are present in the form of a swelling in about two-thirds of the cases. The swelling, when present, is usually due to the pus and its surrounding adhesions, but in some cases it is the liver which is felt. It is a fact that when the pus is between the diaphragm and the liver, the liver is not pushed down, for two reasons—(1) it is adherent; (2) it is easier for the diaphragm to be pushed up, so that if anything moved it would be this structure.

The note is, as a rule, dull on percussion; but if the communication with a cavity such as the stomach still persists, it may be tympanitic owing to the contained gas. Thoracic signs are always present, and usually unilateral. They are:—

A. Displacement upwards of the lung.
B. Dry pleurisy.
C. Pleural effusion.
D. Compression of the lung.
E. Consolidation of the lung.
F. Bronchitis at the base.

It is noteworthy that the heart is not usually displaced laterally, though often pushed upwards.

In the borderland between the thorax and the abdomen there are many holes into which one may tumble. Anything which is too high to be felt in the abdomen and too low to give pronounced and definite signs in the thorax is likely to be overlooked. The pus in a subphrenic abscess is, of course, underneath the diaphragm, and not in the thorax anatomically. But practically, and as far as its clinical signs go, it is in the place where the thorax ought to be.

The question of the advisability of using an aspiratory needle for diagnostic purposes can roughly be summed up by saying that it is not quite safe unless one is prepared to operate immediately, and in any case its best use is during the operation.

The natural history of the condition, if not treated surgically, is likely to be one of three possibilities. It may burst externally. I have experience of one case of this kind in wich I had previously operated for a large appendicitic abscess. The patient was, however, too far from Liverpool to be X-rayed, and too ill to be moved. The signs were vague when I saw her, and appeared more like those of multiple abscesses of the liver. The pus discharged ultimately above the umbilicus.

The second possibility is rupture into a cavity, and Barnard gives the frequency in his collected cases as follows:—

Into a bronchus, 4; pleura, 5; stomach, 8—*i.e.*, a return to where it came from; intestine, small, 1; colon, 2.

Even when they rupture externally, or into the bowel, the patients are not necessarily cured. The danger, therefore, of allowing the abscess to rupture spontaneously is too great to justify one's considering it for a moment.

The third possibility is that the patient, if left alone, dies of toxæmia and exhaustion.

The London Hospital statistics give a mortality of 12 out of 12 cases treated without operation. If we turn to the surgical (or unnatural) history, we find a mortality of 37 per cent.—a high one, it is true, but an improvement on one of 100 per cent.

CASE I.—F. T.; æt. 21; female. Dr. O. T. Williams' case. Eight weeks' history, left-sided pain, one rigor, one attack of vomiting, lay on left side. Temperature 101.2°, pulse 120, respirations 30. Right side, liver felt one inch below costal margin; left side, a fixed and tender mass reaching down to navel, not moving with respiration. P.N. impaired. Under left costal margin a hard, firm tumour felt, continuous with splenic dulness above. Thorax dulness from the 6th to the 12th rib downwards; left base moving badly. Urine contained streptococci once previously; bacilli coli once previously. X-ray examination showed diaphragm raised. Operation: 12th rib removed, perirenal tissue separated, pus found easily above right kidney, tube passed up to diaphragm. No gas in pus. This was probably a left extra-peritoneal abscess, and Dr. O. T. Williams considered it was primarily an infection of the right kidney. Recovery normal.

CASE II.—W. O.; æt. 32; male Pneumonia. Four months before lost 4 stone in weight. When seen, lay on left side. Bulging 6th to 10th space, right side, local tenderness, lower expansion diminished. P.N. dull from 5th rib downwards. Dulness extending down to two inches below costal margin in the nipple line, tender on percussion. X-ray marked bulging up and diminished movement. Operation: 10th rib and 8th rib resected and pus drained. Patient lost his earthy look, and left in three weeks. Smears from pus and agar cultivations disclosed nothing. This, I believe, may have been a case of pneumococcal origin. It is unusual for the infection to spread downwards, but in the absence of any other cause the pneumococcus may be blamed for the infection. The fact that the agar remained sterile is rather in favour of this view.

CASE III.—Woman; æt. 48. Fourteen days ill. Appendix abscess opened under gas. One month later appendix removed; three weeks later subphrenic abscess opened; four weeks later left hospital perfectly well. Bacteriology: Streptococci grown from subphrenic abscess.

BACTERIOLOGY.

With regard to the bacteriology of subphrenic abscess, it is obviously possible to be certain only in cases which are submitted to operation, or which prove fatal. There is, however, even in cases treated surgically, a second difficulty. A localised abscess in the peritoneum implies a certain amount of resistance on the part of the patient. Further, an abscess hidden underneath the diaphragm must be of some considerable size before it is clinically or radiographically recognisable. If the patient survives this period of abscess formation and localisation, the pus is often of an extremely low degree of virulence, having caused severe symptoms more by reason of its quantity than its quality. The result to the bacteriologist may be a sterile tube.

Now, it is important to know not only the organism, but to have a culture of it, since vaccine treatment, however disappointing it may be when stock vaccines bought at a shop are used, is found to be often efficient if it is autogenous.

In obtaining the specimen the delicacy of the organisms must be remembered. One of mine was sterile, having died of cold on its way to the Thompson Yates Laboratory. Hence the pus from these cases must be treated with the greatest possible kindness.

I have been associated in the treatment of two other cases not included in those I mentioned, in which the offending organism was actinomycosis.

As to which operation is to be performed, the loin incision is recommended if the infection is rather diffuse, and the trans-thoracic route if it is localised. They should always be drained from behind, even if they have to be examined from the front.

The position of the patient depends upon the site of the abscess, but it is as well to find out, before the anæsthetic is given, what attitude proves the least embarrassing to his respiration.

When the patient is on the table the needle can be used, and a more exact localisation of the pus made. A rib is resected, usually the 10th, and the intercostal muscles sewn to the diaphragm before an opening is made through it.

One reads descriptions of sewing two layers of pleura together, that is, costal pleura to the pleura over the diaphragm; but this savours rather of a description of an operation intended for those who are never likely to perform it, and written by someone who has never done it. There is not enough tissue in the pleura alone to provide a good hold.

After incising the diaphragm one hopes to find the pus, and here again one has been told to put a finger in and define the abscess cavity and break down septa between one loculus and another. But I have never been able to do much through a hole made by the resection of only one rib. Whether in operations for empyema or for subphrenic abscess, I have steadily avoided all mischievous exploratory investigations.

In fact, in some cases I cannot describe exactly where the pus was, having, in short, preferred the curing of the patient to being able to write an elaborate description of the precise anatomical boundaries of the abscess.

Having let off some of the pus as gradually as may be necessary, the surgeon makes it his first duty to keep a specimen of it. For drainage, a rubber tube is the one I have used in these cases, and it measures 1¼ inches in diameter. Wide drainage for a short time is better than narrow drainage for a long time. After a few days it is split, thus lessening its rigidity, and allowing the walls of the cavity to fall in without pocketing.

Lastly, in those cases in which, owing the condition and situation of the patient, it is possible to have an X-ray examination made by Dr. Holland, it adds much to the confidence with which the surgeon can attack these always serious cases.

THE King has granted permission for the Hammersmith memorial to the late King Edward VII., which takes the form of an endowed cot in the West London Hospital, to be called "King Edward VII. Memorial Cot." The tablet to be placed over the cot will bear the Royal Arms.

RUPTURE OF INTESTINE IN HERNIAL SAC.

By R. ATKINSON STONEY, F.R.C.S.I.,
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Rupture of a coil of intestine in the sac of a hernia as the result of external violence must be of sufficient rarity to make the notes of such a case worth placing on record.

Mrs. C., æt. 46, was admitted to the Royal City of Dublin Hospital on the afternoon of Saturday, July 8th, 1911, with the following history:—About mid-day, while standing on a chair placed on a table in a front garden, in order to watch the Royal procession, the chair slipped and the patient fell to the ground, striking her right groin against the iron handle of the gate as she did so. She was wearing a double femoral truss at the time, as she had suffered from double femoral hernia for many years. She was quite confident that the hernia was not down when she was standing on the chair before the fall. Immediately after the accident she was "doubled up with the pain," and felt faint, and vomited. When admitted to hospital about three hours later, her temperature was 97 and pulse 80, the abdomen was soft and moved with respiration, there was pain and tenderness in the right groin, both above and below Poupart's ligament, but there was no sign of bruising of the skin. The truss which she had been wearing had a large oval pad covered with soft flannel. In the evening the temperature was 100 and the pulse was 80, there was very little pain and there had been no vomiting. The patient was only allowed sips of milk and soda-water, and hot stupes were applied to the groin. The bowels moved naturally during the night. The next morning, Sunday, the 9th, the temperature was 97.8, the pulse 100 and respirations 20. The liver dulness was normal; the patient complained of a good deal of pain in the right iliac fossa. The abdomen was not distended and moved well with respiration; there was no rigidity. She was given a simple enema with no result. Orders were given for the pulse to be taken every hour, the hot stupes were continued, and only a mouthful of fluid was allowed occasionally. During the day the patient vomited frequently; at 7.30 that evening her pulse had risen to 122, her respirations to 28 and temperature to 98.4. The abdomen was somewhat distended, though still soft and moving with respiration, and there was no rigidity even over the iliac fossa. As at 10.30 p.m. the pulse rate had increased to 136, and the liver dulness in the mammary line was decreasing, it was decided to operate. The patient was brought to the theatre at 11.30 p.m. and anæsthetised with ether. The abdomen was washed with ether and painted with iodine. On making an incision through the outer border of the right rectus, purulent fluid but no gas escaped. Several coils of intestine, covered with lymph and agglutinated by it, appeared immediately under the incision. One of these coils had a perforation about the size of a threepenny piece with everted mucous membrane almost completely closing the opening. The omentum was spread out in the neighbourhood, slightly adherent to the inflamed coils of intestine and shutting off fairly well the general peritoneal cavity. Gauze wipes were introduced under the edges of the incision to localise the area of infection, and the perforation was closed by two layers of silk sutures. The surrounding pus was swabbed out, no attempt being made, however, to remove the lymph from the coils of intestine; the kidney pouch was clean, but the pelvis was full of turbid fluid without any smell, whereas the pus in the neighbourhood of the perforation had a distinctly fæcal odour. This fluid was mopped out as thoroughly as possible. Two large split rubber tubes filled with iodoform gauze were introduced, one to the bottom of Douglas's pouch and the other to the iliac fossa close to the perforated coil; the gauze wipes were removed and the wound closed except where the drainage tubes emerged. Two pints of saline were injected into the axilla during the operation. The patient was placed in the Fowler position in bed and half a pint of saline was given slowly by the rectum every hour during the night; all of this was retained.

The following morning (Monday, 10th) the pulse was 110 and strong, and the temperature was 98.6. As the patient ceased to retain the salines a simple enema was given, and after two hours' interval the salines were resumed and were retained. In the evening the patient was allowed 1 oz. of fluid by mouth every half hour. During the night most of the rectal salines were not retained, so in the early morning 2 pints of saline were injected into the axilla. The next day (the 11th) a turpentine enema was given and resulted in a small constipated motion. As there was no vomiting, patient was allowed 1½ ozs. of fluid every half hour, and she was also given a pint of saline by the rectum every four hours, which was retained. The wound was then dressed for the first time. There was a considerable discharge of pus from both tubes on the removal of the gauze wicks. That night the patient had three fluid motions and vomited a little several times. The following day (the 12th), as the vomiting had stopped, the patient was allowed 3 ozs. of fluid every hour and the salines were discontinued. The pulse was strong and varied from 110 to 120, and the temperature was about 99 deg. From this on the patient was dressed every day as there was a copious foul-smelling discharge from the wound, but no trace of fæcal material. The stitches were all removed on the 15th. During this time the patient suffered severely from diarrhœa, having as many as 14 motions in the 24 hours. But after the first week she made a steady recovery, the discharge from the wound gradually lessening, and she finally left the hospital with the wound soundly healed on August 11th.

The successful result of the operation was fortunate, considering the delay of nearly 36 hours after perforation. This delay was partly due to the difficulty in obtaining the patient's consent to operation; but for the first 24 hours after the accident it was hard to realise that there was a serious intraperitoneal lesion, taking into consideration the history of the occurrence and the condition of the patient. From the patient's account of the accident and the appearance of the truss, it was quite impossible to see how a rupture of the intestine in the abdomen could have been caused, and as the patient was quite positive that the "rupture was not down" at the time when she fell, it was thought at first that there was no very grave injury. The continued absence of rigidity also favoured this conclusion. However, on Sunday evening, nearly 36 hours after the accident, the steadily rising pulse rate, gradually increasing distension and commencing loss of liver dulness, with the continuance of pain and vomiting, showed that there must be some serious trouble in the abdomen, probably intestinal perforation and commencing peritonitis. It was therefore decided that no further time should be lost, but that an exploratory operation should be performed. In the light of what was found at the operation, it is probable that the intestine was forced into the hernial sac during the act of falling and was then burst by the sudden blow on the pad of the truss as the patient's groin hit the gate-handle; subsequently, but before admission to hospital, the ruptured coil slipped back into the abdomen. The fact that the intestine was burst, and not cut or crushed by the truss, is proved by the appearance of the opening, which was nearly circular, with the mucous membrane everted and no sign of surrounding bruising. The sudden compression of the distended coil of intestine in the confined space of the hernial sac caused it to burst in much the same manner as children burst a paper bag.

THE
RELATIONSHIP OF THE NATIONAL INSURANCE ACT TO THE VOLUNTARY HOSPITALS, ESPECIALLY THOSE WITH ATTACHED MEDICAL SCHOOLS.

By W. McADAM ECCLES, M.S.Lond., F.R.C.S.Eng.

Insurance against sickness is most wise, especially when it is contributory. To be satisfactory it must always be associated with adequate medical treatment, and medical treatment of a proper character cannot be cheap.

The public as a whole are not fully aware of the enormous advance of medicine in all its branches during the last fifty years, nor of the fact that this advance has necessitated greater expenditure. It is false economy to endeavour to obtain cheap, and therefore in many instances inefficient, medical attendance. This is true in relation to private medical practice, but it is even more true in relation to hospital treatment.

The National Insurance Act must necessarily have a profound effect upon the work and income of the general practitioners of medicine. It will effect little if at all the income of the consultant, but it will produce considerable changes in connection with the hospital on the staff of which he is, and on the medical school wherein he teaches. It is to review some of these possible changes that has induced me to write this article. The opinions expressed may not find acceptance with all, but they are at least worthy of consideration, and time alone will show whether they are justified or not. It is my hope that by thus stating them and attention being thus drawn to them, some unhappy results either to patient or hospital may be avoided.

The National Insurance Act (1911) may affect a voluntary hospital in many ways. The effect may be upon:—

(*a*) The patients.
(*b*) The medical staff.
(*c*) The finances.
(*d*) The employees.
(*e*) The medical school, if there is one attached.

The Patients.

There are three classes of patients in connection with a number of the voluntary hospitals—out-patients, in-patients and maternity patients, the latter being both out-patients and in-patients.

Out-patients.—Persons who attend a hospital as out-patients may be classified as follows:—

(*a*) Adult males.
  (i) In work. These for the most part will be insured persons.
  (ii) Out of work through chronic ill-health, incapacity, idleness, old age, etc. These for the most part will not be insured persons.
  Probably the number in Class 1 will be increased, chiefly because more men will "declare sick" on account of small ailments than before, and will drift to the voluntary hospital, especially if their "insurance doctor" considers their ailment too minor a matter to require his treatment. This drifting to the hospital will entail, if the patients are admitted to the casualty department, a good deal of extra work in determining whether the ailments are genuine or no.
  Probably the number in Class 2 will also be increased, as there will be many who will drift to the voluntary hospital after "sickness" and "medical benefits" are exhausted. Possibly others who are dissatisfied with their medical treatment from their "insurance doctor" after attending him for a given time will gravitate to the hospital and swell the number of out-patients unless their admission as such is checked.

(*b*) Adult females.
  (i) In work: These for the most part will be insured persons.
  (ii) Married women not in work, chronic invalid women, old women, etc. These for the most part will not be insured persons.
  (iii) Women who are entitled to "maternity benefit."
  Probably the number in Class 1 will be increased, chiefly for the same reasons as given under males.
  Probably the number in Class 2 will not be increased.
  Probably the number in Class 3 will not be increased.

(*c*) Children.
  These will not be insured persons, and the number attending any voluntary hospital will not be altered by the Act.

In-patients.—Persons who are admitted as in-patients into a voluntary hospital may be classified as follows:—

(*a*) Adult males.
  (i) In work. These for the most part will be insured persons.
  (ii) Out of work. These for the most part will not be insured persons.
  Probably the number in Class 1 will be increased, chiefly for the following reasons:
    (*a*) Practitioners will insist, and rightly, on patients entering hospital for surgical operations more often and earlier than before, *e.g.*, cases of hernia.
    (*b*) Patients themselves will recognise the desirability of early hospital treatment.
  Probably the number in Class 2 will not be increased.

(*b*) Adult females.
  (i) In work. These for the most part will be insured persons.
  (ii) Married women not in work, chronic invalid women, old women, etc.
  (iii) Women who are entitled to receive "maternity benefit."
  Probably the number in Class 1 will be increased, and for the same reasons as given under males.
  Probably the number in Class 2 will not be increased.
  Probably the number in Class 3 will not be increased.

(*c*) Children.
  These will not be insured persons, and the number admitted as in-patients will not be altered by the Act.

Reviewing, therefore, the persons who will be either out or in-patients at a voluntary hospital now that the Insurance Act has become law, it will be seen that there will probably be an increase in the number, and therefore that the work and the expenditure of the hospital will be correspondingly increased.

Although the Act does not provide for any treatment in a general voluntary hospital, it is likely that many of the "insured" will consider that they have a "right," because they have paid insurance subscriptions, to admission to hospital both as out and in-patients. If this happens to be so in the future, it may cause some amount of friction in the matter of admission or its refusal.

There is another point of view from which the relationship of hospitals to the Insurance Act can be seen, and that is, the Act may tend to make the hospitals more and more the centres for consultation between the "insurance doctor" and the consultant. This can only be for the good of all, provided that the general practitioner himself does not abuse the privilege by referring patients to hospital who should rightly pay a moderate fee to a consultant.

The question has already been mooted as to whether any insured person should be received for treatment at a voluntary hospital. The answer obviously is that the hospital should be placed at the disposal of any necessitous person, but that the authorities of the hospital should reserve to themselves the right of refusing to treat those persons for whom the State has, or appears to have, made provision.

THE MEDICAL STAFF.

The working of the Act will affect both the visiting and the resident medical staff.

Until the Act has actually been in working, it is a little difficult to say precisely its effect.

But at the present time there is some uncertainty as to the proper attitude for the members of the staff of a voluntary hospital to adopt towards the Act. It is quite certain that necessitous persons when ill, even if insured, must receive treatment. Many consultants on the staff of the hospitals have agreed not to work under the Act until the just demands of the profession have been secured. It would, to my mind, have been the only right and wise course if *every* medical officer attached to a voluntary hospital had taken such a pledge. Supposing, therefore, the Insurance Commissioners refuse or have not the power to grant these demands of the profession, what should be the attitude to be taken by the staff of a voluntary hospital? It may be the duty of the authorities of the hospital to see that the hospital and its funds are not abused by their being used for insured persons, but the voluntary worker on the staff of a voluntary hospital has simply a duty to the patient who needs a service, and is not acting under any contract thereby. Still, it would never do for this voluntary service to be a loop-hole whereby service under the Act is given by one branch of the profession against the wishes of another branch of the same profession. Until, therefore, matters are made much more clear by the outcome of actions of the Insurance Commissioners, the members of the staff of a voluntary hospital are bound to treat the sick.

Up to now the medical staff of a voluntary hospital have always been ready and willing to treat any person provided two conditions subsisted, that the person was ill and therefore required treatment—and that the person was too poor to pay for such treatment as the hospital alone was able to provide. But under the Act the State undertakes to provide "medical" treatment, for which payment is to be made from "medical" benefit. There is, however, no clause or section in the Act whereby adequate payment is to be made to the hospital for such treatment as can be carried out only at a hospital, and no clause for any payment to be made to the staff of such a hospital for their services. Care will, therefore, have to be taken that this is not another means whereby medical practitioners are made to perform gratuitous service to those who can afford to pay at least in part for such treatment.

Another matter will also need careful watching, and that is the filling-in and signing of necessary certificates under the Act. This should certainly not fall upon the already over-worked resident staff. No provision is made for the payment of anyone in connection with such certificates when the "insured person" is a patient at a voluntary hospital.

There may be a tendency also for that harmonious and humane relationship which now exists between most patients and doctors in this kingdom to be so altered as to bring about strained conditions. When a person thinks that he has a right, on account of contribution to an insurance fund, to the services of a medical practitioner, much of the personal and friendly relationship is apt to disappear. This would be a grave pity if it were an outcome of the working of the Act.

THE FINANCES.

Income.—The income of a voluntary hospital, at any rate in London, is derived from the following sources:—

Annual subscriptions	25 per cent.
Donations	11 ,,
Hospital Sunday Fund ...	5 ,,
Hospital Saturday Fund ...	3 ,,
Workpeople's contributions ...	9 ,,
Patients' contributions ...	9 ,,
Interest from investments ...	32 ,,

Thus it will be seen that there are several sources of income which may be threatened by compulsory contributions under the Insurance Act—viz., annual subscriptions, workpeople's contributions, and possibly donations, and the Sunday and Saturday Funds.

There can be no doubt that some who contribute regularly to hospitals will find that they cannot give as much or at all when they have made their compulsory contribution to the Insurance Fund. Workpeople who now contribute out of their wages may be quite unable to do so as well as to pay their weekly sum towards their insurance. Hence it follows that from these sources it may be that the sum accruing to the hospitals will be diminished. At the same time, it is to be hoped that those who can afford to contribute larger sums out of their abundance will be induced to do so rather than let these necessary and helpful institutions suffer, and therefore the ailing poor go without adequate hospital treatment. The awakening of the nation to the value of early and good institutional treatment may even have the effect of increasing the yearly income of the voluntary hospitals.

Expenditure.—But while income may diminish, may remain the same, or may even somewhat increase, the expenditure is likely to become certainly larger. This will be caused by increase of the number of patients, and increase in the expense of thorough treatment.

Grants from Insurance Funds.

There are two possible ways in which a voluntary hospital may receive grants from Insurance Funds, viz.:—

(*a*) Under Section 12, subsection 2 (*c*) of the Act.

(*b*) Under Section 21.

Under Section 12, subsection 2 (*c*) it is enacted that should a person, being a member of an approved society, be an inmate of a hospital supported by charity or by voluntary contributions, *and the person has no dependants*, then his or her "sickness" benefit (or her "maternity" benefit, even if she has dependants) shall, if an agreement has been made between the society and the hospital, be paid in whole or in part towards the maintenance of such person in the hospital.

A little consideration of this possibilty will show how rare will be the payment to a hospital, except in the case of "maternity" benefit.

Further, it will require a definite prearranged agreement between the approved society and the hospital, and it is likely that this may lead to serious complications.

Under Section 21, it shall be lawful for an approved society or Insurance committee to grant such subscriptions or donations as it may think fit to hospitals. Such contributions can only come out of surplus funds, and there is no evidence that any such will exist, and even if they do, and contributions are made, the amount cannot in any case be equivalent to the expenditure of the hospital in the treatment of "insured persons."

Supposing money were to be received by the hospital, its acceptance from an organised outside body, such as an approved society, might lead to a request for some amount of control so as to check the expenditure of the grant.

Further, as the money would virtually be received from State funds, it would be the means of suggesting State control in the future.

Neither of these external methods of control would, in my opinion, be beneficial to the majority of the voluntary hospitals, and particularly those with medical schools attached to them.

The Employees.

Every one of those employed by a voluntary hospital whose income does not exceed £160 a year, and is not in receipt of a pension of at least £26 a year, will be required to become "insured persons." Included among these will be :—

(1) Nursing staff.
(2) Wardmaids.
(3) Hospital kitchen staff.
(4) Scrubbers.
} Nearly all of these are women.

(5) Clerks.
(6) Porters.
} Most of these are men.

The hospital out of its own resources will have to find the employer's contribution for all of these. In addition to this the employed will have to contribute their share, or the hospital will have to do it for them.

In return for the amount thus contributed there would be "medical benefit," "sickness" benefit, and a small "sanatorium" benefit; and possibly, in a few cases, "maternity" benefit. Up to the present most of those employed at the hospital have received their medical treatment free of charge, and will probably continue to do so.

Thus all that part of the contribution which should go for "medical benefit" will be lost, unless the employee is treated outside the hospital. It would seem imperative also that in order to obtain their "sickness benefit," such "insured persons" must not receive board and lodging from the hospital.

The Medical School.

There is very little doubt that for the next few years the effect of the Insurance Act will be to make the parents and guardians of prospective medical students think twice before they put those over whom they have control into the medical profession. This condition of things must act deleteriously, for the time being at least, upon medical schools, and may rather seriously interfere with their efficiency by considerably diminishing their income.

Further, the altered relationship of many of those who attend the hopital as patients, because they will almost certainly claim a "right" for their treatment, may make them unwilling to be of value for clinical teaching. Tact, however, may overcome this, but great care will have to be taken that there is no interference with a liberal and willing supply of such material. At present nothing could be better than the relations which subsist between doctor and patient in our British medical schools, and it would be a sorry day if anything in the way of legislature were to alter the conditions which are now found working so smoothly.

Conclusions.

It is yet too early to allow of any concrete pronouncement as to the effects of the National Insurance Act upon the voluntary hospitals, but there are indications that the Act may have very distinct results so far as these splendid institutions are concerned, and it is well, therefore, to be prepared to meet the effects so that as little harm as possible may result, and this ought to be done without any interference with the beneficent action of the working of the Act on behalf of the sick of our country.

OPERATING THEATRES.

EAST LONDON HOSPITAL FOR CHILDREN, SHADWELL.

Case of Inguino-femoral Hernia.—Mr. J. E. Adams operated on a boy, æt. 5, who had been admitted for operation on a hernial swelling which had been noticed ever since the child began to walk. The swelling had increased in size since an attack of whooping cough five months before admission. There was no visible hernia, but a definite expansile impulse was present in the right inguinal region when the child coughed, and the right side of the scrotum was larger than the left.

The usual oblique incision for the radical cure of inguinal hernia was made. The region of the external abdominal ring was fully exposed, but neither a hernial sac nor the spermatic cord could be found to emerge at this spot. The aponeurosis of the external oblique was therefore divided in the line of the incision, but the inguinal canal in its lower part was empty. The testis was then pushed up from the scrotum and the tunica vaginalis opened. It was then found that a probe could be passed *viâ* the tunica vaginalis into the abdomen; this hernial sac of the complete congenital type was seen to pass beneath Poupart's ligament towards the internal abdominal ring. It was clear, therefore, Mr. Adams pointed out, that he was dealing with a congenital inguinal hernia in which the testis and patent funicular process had reached the scrotum by emerging at the internal abdominal ring, traversing the outer half of the inguinal canal and passing downwards on the outer side of the pubic spine. The sac was dealt with in the customary way for treatment of congenital inguinal hernia—namely, by dividing the sac at the upper end of the testicle, separating it from the constituents of the cord, ligaturing it by transfixion and cutting it away; the lower end was left open. On freeing the neck of the sac, Poupart's ligament was pulled upwards to reach the internal abdominal ring. The exploratory incision through the external oblique, which had not divided the pillars of the external abdominal ring, was closed with a few catgut stitches and the skin wound sutured with salmon gut.

Mr. Adams remarked that in a case of this description one might have been tempted to say that a mistaken diagnosis had been made, seeing that no sac could be discovered, even after the aponeurosis of the external oblique had been divided, but the inguinal canal appeared also to lack a spermatic cord, therefore it was necessary to start exploration from below. An incision of the tunica vaginalis, which contained an excess of fluid but no hernial contents, enabled him to prove its continuity with the general peritoneum, and thus the abdominal course which had been traversed by the tunica vaginalis and testis was demonstrated. Such inguino-femoral sacs, he said, are described, but as far as he was aware they occur mostly in connection with congenital sacs. The crural variety of misplaced testis is well known, and, in such cases as the present one, the testis must have passed this position and yet have gained the interior of the scrotum.

The after-history of the case was perfectly satisfactory; the wound healed by first intention, and the child was discharged ten days after the operation.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Sept. 28th, 1912.

Diarrhœa of Phthisis.

Diarrhœa, like other complications preventing proper alimentation of phthisical patients, constitutes a serious accident in the course of that disease.

It can depend, says Dr. Thomas, on three distinct causes—hyper-alimentation; certain drugs ill-tolerated; lesions of the intestine due to bacilli of Koch from swallowing virulent expectoration.

Diarrhœa from the first cause is particularly due to the ingestion of fats, consequently cod-liver oil, sardines, butter, etc., should be avoided. The *régime* will consist in raw meat, powdered meat, vegetables, white of egg, and alkaline water.

Milk is variably borne according to the individual: for some it forms one the best elements of nutrition, for others it is not tolerated. Kephir might take its place, and from the presence of lactic acid the diarrhœa is diminished.

In rebellious cases the digestive tract should be given rest, only rice water allowed for some hours, after which subnitrate of bismuth and paregoric might be useful.

Diarrhœa due to bacillary infection is generally very rebellious to treatment, for the irritation of the intestinal mucous membrane is kept up by the presence of granulations and ulcerations. The diet will be chiefly vegetarian

Several drugs have been prescribed with varying results: phosphate of lime (2 dr. daily), tannigene (10 gr. three times daily), dermatol (1 dr. daily), oxide of zinc, salicylate of bismuth (1 to 2 dr. daily). Glycerine seemed to have given remarkable results in the hands of Bouchut:—

Glycerine, 10 oz.
Rum, 4 oz.

Three tablespoonfuls a day in hot milk.

In very obstinate cases methylene blue has succeeded—

Methylene blue, 2 gr.
Lactose, 10 gr.

For one wafer; three daily.

GERMANY.

Berlin, Sept. 28th, 1912.

At the sixth Congress für Geburtshülfe and Gynækologie, one of the first subjects that came up for discussion was the

Treatment of Wounds of the Peritoneum.

Hr. Brouha, Liege, said that mechanical irritation of the peritoneum was dangerous. It should be cleansed dry; washing even with physiological solution was dangerous. All antiseptic preparations should be avoided with the exception of a weak tincture of iodine, which might be made use of for pedicles and suspicious places. The use of gloves was an advance in the prevention of operative infection. It was especially important to leave the serosa dry after operations. For this purpose the field of operation might be shut off by careful packing with compresses. This would also assist in procuring the arrest of hæmorrhage. In all cases of post-operative peritonitis the wound should be reopened as early as possible.

Hr. Meyer, Copenhagen, said that when there was no question of coarse impurities (remnants of food, fæces, etc.), washing out of the abdomen was rather harmful than useful. A very searching cleansing of the peritoneum, especially as regarded blood, was not necessary. Drainage of the peritoneum was useless or harmful so long as it was not for the purpose of draining encapsuled collections. No great weight need be attached to the "peritonealisation" of wounds of the peritoneum, especially when it could not be accomplished without fixation or displacement of intestines. It was better to shut off such wounded surfaces in the small pelvis from the rest of the peritoneal cavity.

Hr. Franz, Berlin, said that every peritoneal wound should be looked on as infected. All investigators who had examined the peritoneum after operation had found bacteria. It was impossible to operate without the entrance of germs. In the great majority of cases these germs did no harm, as they only fall on to the peritoneum in small numbers, they were not virulent, or they were destroyed by the protective power of the patient's system. The hands of the operator and his assistants were dangerous. Rubber gloves removed this danger. The patient's skin, when it was not germ free, could be made so, or sufficiently so, by tincture of iodine. The covering of the skin with antiseptic cloths was a necessary complement of disinfection. The germs of the air were not dangerous. The chief danger lay in the germs already within the body of the patient (as in twisted pedicles, necrotic tumours, germs from bowel, bladder, decomposed myomata, tumours of the adnexa, carcinoma of the uterus, etc.). Germs from the bowel were particularly dangerous, which wandered through uncovered surfaces of bowel or were forced through by gaseous distension within. The dangers arising from the "auto-germs" of the patient could be diminished or removed by the operation. The abdomen should be opened with very small incisions; transverse ones were better than longitudinal ones. Full narcosis was desirable in order to save the intestines as much as possible. Lumbar anæsthesia was particularly suitable for gynæcological operations. Blood-cyst fluid, amniotic fluid, and pus should be kept out of the abdomen as much as possible; if it had got in it should be removed as gently as might be. Every little particle, however, need not demand the trouble of removing, and it was better not to flush out. Drainage should only be resorted to when large raw secreting surfaces were left that could not be covered over, and especially where the wound was smeared over with pus. Drainage should only be carried out through the abdominal walls when it could not be done through the vagina.

Dr. H. Macnaughton-Jones, London, said that bactericide and other irritating chemical fluids should be kept away from the peritoneal cavity. Sterilised physiological solution was the most suitable agent. Pus, blood, contents of cysts were a source of irritation when they found their way into the peritoneal cavity; they gave rise to exudation and peritonitis. Asepsis of the abdominal cavity could not be obtained without complete arrest of bleeding and complete covering of all denuded places with peritoneum. Disinfection of the bowels after operation by bowel disinfectants was also of importance. Peritonitis, as a result of manipulation of the bowel, could be almost completely avoided by attention to the following point: efficient drainage for removal of included fluids. It was, as a matter of fact, an extremely rare occurrence.

AUSTRIA.

Vienna, Sept. 28th, 1912.

At the meeting of Oculists in Bohemia this year the principal subject of discussion turned on

Mendel's Law of Development.

Pick quoted his experiments in vegetable and animal life and contended that the same law prevailed in the human genus. The eye diseases closely followed parental defects such as neuritis optici, hemeralopia, and others, as Nettleship endeavoured to prove long ago, but few oculists since that time have given us such practical knowledge as confirms any law.

Elschnig here gave the history of a series of moderate and severe cases of myopia hypermetropia, retinitis pigmentosa and albinism, and found that the higher forms of myopia agreed with Mendel's law, but in the others it failed. In a family of 50 descendants where the parentage had retinitis pigmentosa only one isolated case appeared.

Hofmann recounted his experiments with rats which he commenced to breed at the Physiological Institute of Innsbruck and has continued at Prague where the development of the bulbus of the eye has gradually shrunk to a state of anophthalmus or microphthalmus. The anomaly existed greater on the female side than the male and when the abnormal male was confined with the normal female the production was almost normal. There is, therefore, a good deal of complication in arranging any law of generation.

Nutrition, water and surroundings cannot have any influence on the results, as Innsbruck and Prague are very different and yet the final conditions are the same. Lederer next gave a description of his experiments on the manometric measurement of the internal pressure of the eye which he conducted with a fine cannula in an anti-posterior direction through the cornea and lens. When the conjunctiva or oculomotor was irritated with thread or electricity the mercury rose in the manometer at every movement of the eye. Voluntary movement was conducted in the monkey, and the same result obtained as in the guinea-pig. In a patient where enucleation was performed he obtained the same pressure when movement occurred, but when the eye was brought to rest a distinct fall of 5-10 millimetres of the mercury took place. This he thought was at variance with the theoretical discussions that had previously taken place. Waldstein recorded the history of 20 cases of enucleation for malignant tumours and acute micotic irido-cyclites, which he treated subsequently with vaseline and paraffin. This he considered was the best method of preventing inter-ocular infection. Where enucleation was impracticable excentration of the fluid of the bulbus could be replaced by injecting paraffin and serve two purposes, disinfection and cosmetic. Zirm gave the history of a few cases of traumatic cataract which occurred through extraction by the circular operation with extrusion of the iris producing sympathetic ophthalmia in the other eye 24 days after. The vision fell to counting the fingers at 1 metre, but after rubbing with mercury and injecting tuberculin the vision improved to 5-20.

In conclusion he condemned extracting the lens without first performing iridectomy which was an important step in the operation as pressure on the ciliary nerve produced sympathetic ophthalmia and often led to serious consequences in the opposite eye. A similar pressure on the stump of the optic nerve after enucleation produced the same trouble and when not so severe inflammation and reddening which when continued for some time produced toxines with various bacteria that were thrown into the circulation, finally causing great destruction.

CANADA.

Montreal, Sept. 16th, 1912.

Annual Meeting of the Canadian Medical Association.

(Continued from page 336.)

A distinctive feature of the meeting, and in fact a unique happening at a medical meeting, was that sermons dealing with health matters were preached by visiting medical men at the Edmonton churches. Sir James Grant, of Ottawa, who, in spite of his 83 years is still strong and vigorous, occupied the pulpit of Knox Church. He choose as his text, "Turn ye, turn ye; why will ye die?" and delivered an eloquent and impressive discourse on various matters connected with health and sanitation. Dr. Bruce Smith of Toronto preached in the Metropolitan Methodist Church, taking as his text, "It doth not appear what we shall be. The earth is the Lord's and the fullness thereof."

On the evening of the 13th, Dr. J. George Adami, Professor of Pathology at McGill University, gave an address. He, too, took as text, "Sins of the father," but delivered thereon no moral disquisition, but rather a scientific discourse, dealing with the inheritance of disease and the consequences of the sins of the father. Dr. Adami does not accept in its entirety the modern popular doctrine that acquired conditions are not inherited, and as a corollary that the germ cells are unaffected no matter what vicissitudes are undergone by the body at large, or rather perhaps by the body of the parent-at-large. He repudiates the doctrine that certain gross diseases do not directly injuriously affect offspring and stigmatises as specious, arguments that tend to show that the incidence of such diseases in children is due to diathesis, environment or maybe to a taint of degeneration which originated possibly generations back. Dr. Adami says that he is sufficiently old-fashioned to repudiate this new-fangled "Weismannism" and still holds to the belief that the sins so-called of the parents against the body, or at least, a very important series of such sins, do influence the progeny to his hurt.

First dealing with alcohol, Adami ranged himself on the side of those who contend that the children of an alcoholic parent or of alcoholic parents are prejudicially affected by their parent's or parents' habit. As for the inheritance of certain infections as tuberculosis and syphilis, Adami is of the opinion that the children of parent or parents suffering from these diseases are not merely of lowered vitality, more liable to succumb to childish ailments, but notably in the case of tuberculosis, exhibit a peculiar liability to succumb to the same parental disease. Furthermore, time and again the practitioner has observed a relationship between chronic or acute infection suffered by either parent and abortion, blighted ovum, still birth or monstrosity. Moreover, it is pointed out that inheritance of disease is far from being everything. From the point of view of eugenics, there are the terrible effects of congenital disease, and more especially of infections conveyed to the growing individual while in the womb or during parturition. When it is accepted that at least half of gynæcological practice is due to gonorrhœa and its results, that a large proportion of the cases of infantile blindness is of gonorrhœal origin, that as demonstrated by the Wassermann test, practically all cases of locomotor ataxia, and nearly all cases of general paralysis of the insane are of syphilitic origin; when it is known that most cases of multiple successive abortions are syphilitic, and it is recognised that the puny, miserable parodies of humanity, doomed in most instances to an early death, are too often the result of syphilitic disease in the parent; when the preventable ills that follow in the train of these venereal diseases are realised, Adami wholly agrees that the time has come when no longer should these matters be referred to by circumlocutions, when for the good of the coming generations open war should be waged against gonorrhœa and syphilis, and when above all our children, for their safety and welfare, should be instructed as to the dangers they must ward against, not merely on account of their own health and happiness, but for the sake of the generations yet unborn.

In concluding, the speaker praised Australia for her great work in this direction, noting that at the meeting of the Australian Medical Congress two years ago a resolution was passed to the effect that syphilis is responsible for an enormous amount of damage to mankind, and that all preventive and remedial measures against it are worthy of the utmost consideration. The government of Victoria then took up the matter and Dr. Ham, its chief health officer, supervised a collective investigation with the aid of the medical profession of Melbourne. Dr. Conrad Hiller made official tests; syphilis was made a compulsory but impersonal notifiable disease for a period of twelve months within the Melbourne area. In all 5,500 cases were reported during this period. For four months at the end of the period all the cases visiting two of the hospital clinics, eye, ear, nose and throat cases, were tested. The results showed that out of a hospital population of 550, at least 13 per cent. were syphilitic. Adami made an earnest plea that Montreal, Toronto, Winnipeg, Edmonton, Clagary and Vancouver should follow the example set by Melbourne, so that with a knowledge of the prevalence of syphilis means should be adopted to eradicate a scourge which brings in its wake such hideous after-effects.

Among other important and instructive papers read were some on

Mental Diseases and Their Treatment.

Dr. Ryan of Kingston, Ontario, read a paper in which he traced the great improvement made in the treatment of the insane in Ontario during the past seven years, and in discussing the paper, Dr. Nicholls, of Edmonton, said that in the treatment of the insane Alberta was not even where Ontario was seven years ago, but where Ontario was twenty years ago.

Dr. H. A. McCallum of London, Ontario, was elected president elect, and London was selected as the next place of meeting. The following were elected members of the Executive Council of the Canadian Medical Association:—Drs. Whitland, Edmonton; Findlay, Montreal; Adami, Montreal; Halpenny, Winnipeg; Reeve, Toronto; McKechnie, Vancouver; Weld, Vancouver; Small, Ottawa; Kennedy, Macleod; Daniels, St. John, N.B.; Madre, Halifax; Archibald, Montreal; Primrose, Toronto; Conroy, Charlottetown; and Young, Saskatoon; Dr. H. G. MacKid, Calgary, as President of the Association, will be a member of the committee, *ex officio*.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Edinburgh Post-Graduate Course.—The post-graduate classes, which have just terminated, have this year been well attended and much appreciated by those frequenting them. The experiment which was tried for the first time this year, of having a continuous set of classes lasting from the middle of July to the end of September has been completely successful, some of the members of the class having remained for the three courses into which the two and a-half months' series is divided. In its original inception, the post-graduate course was intended mainly as a general course of instruction at which men might brush up their knowledge all round, and this ideal has been adhered to in the September course. Soon, however, it was found that a certain amount of specialisation was desirable, and the first result was to divide the September lectures and demonstrations into two sets, surgical and medical; then followed the August course of systematic instruction in the various departments of internal medicine, and finally, the July course of instruction in diseases of children. At present it would seem as though the more specialised and better organised courses on children's diseases, medicine proper and surgery, are more popular than the original general course, which includes classes on a variety of loosely strung together subjects, and it is probable that a better organisation of the non-surgical part of the September course would improve it. As it is, however, over a hundred graduates were attracted to Edinburgh this year, and of this number a large proportion came from over-seas.

The Insurance Act.—During the vacation months even the Insurance Act has been thrust into the background by holidays, and there is little to chronicle concerning it, so far as Scotland is concerned. Indirectly, however, it has provided competition with the sea serpent and the giant gooseberry of the silly season, in the shape of a mysterious advertisement in some of the local Edinburgh newspapers for a thousand motor cars. That remarkable body, the "National Insurance Medical Association" now invites tenders for 1,000 motor cars, chiefly 10-12 h.p., to be delivered in this country early in January. Further particulars can (says the advertisement) be obtained from Dr. Knight, the honorary organising secretary, 7, Chambers Street, Edinburgh. A reporter of the *Edinburgh Evening Dispatch*, however, could obtain none of the further particulars, and is obliged to confess that he left Dr. Knight's presence as wise as when he entered it. A call at the offices of the Scottish commission revealed the fact that nothing was known there of the National Insurance Medical Association—in short, the whole matter is wrapped up in mystery until the Knight of the Thousand Cars chooses to explain it.

INFECTIOUS DISEASES.

Small-pox in Kirkcaldy.—About a fortnight ago small-pox broke out in Kirkcaldy, a notorious stronghold of anti-vaccination. A number of persons have been infected, and there have been several deaths. Strict precautions as to isolation, etc., are being enforced, and it is hoped that the epidemic will remain of limited extent. Free vaccination is being offered, and chicken-pox has for the time being been included among the notifiable diseases.

In Edinburgh there has been a somewhat widely-spread epidemic of diphtheria in one of the Eastern districts of the city; the outbreak is believed to be due to a milk infection.

In Dundee there has been a rather serous epidemic of scarlet fever, there being now nearly 120 cases under treatment, whereby the hospital accommodation is somewhat strained, as recently one of the largest pavilions in the hospital was given over to the treatment of tuberculosis. A large number of the patients are adults, and the disease is, happily, of a mild type. Up to the present there have been no deaths. The infection is not confined to any one district in the city, and its source has not been traced.

BELFAST.

Presentation to Dr. J. T. Creery.—The friends and patients of Dr. J. T. Creery, of Coleraine, Co. Antrim, took the occasion of his recovery from a motor accident, and the completion of thirty years of practice among them, to make him a handsome presentation last week. A committee, under the presidency of Mr. Hugh T. Barry, M.P., and representing all creeds and classes, was formed, and met with generous responses from all quarters. As a result of this, they handed to Dr. Creery last week a gold watch and chain and a handsome cheque. Dr. Creery, in thanking the donors, referred to the fact that he had been Dispensary Medical Officer and Officer of Health for twenty-eight years, and during all that time the most cordial relations had existed between him and the various boards connected with his work.

Doctor's Motor on the Footpath.—A curious case came before the magistrates in Belfast last week, when Dr. William Patton, of Grosvenor Street, was summoned by the Corporation for driving his motor car over the footpath. It appears that there is a gateway leading into the back of Dr. Patton's premises, where the garrage is situated, but there is no corresponding break in the footpath, and for thirty years he and his predecessors have driven cars and motors through the gate and over the path. Suddenly the authorities seem to have concluded that this was dangerous to pedestrians, and issued the summons. It was proved, however, that this gateway had existed when the plan of the street was drawn up and passed by the Corporation, and the magistrate held that the bye-laws forbidding driving on the footpath could not abrogate the right of every man to have free entry to and egress from his own premises, so the case was dismissed.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE POSITION OF DENTISTRY.

To the Editor of The Medical Press and Circular.

Sir,—In criticising my last letter which appeared on September 18th, "An Interested Observer" states, in your last issue, the case for his clients, the legally unqualified dental practitioners, clearly, plausibly and temperately; but this does not prevent him from quite unconsciously suppressing essential truths, suggesting much that is false, and casting unmerited aspersions upon past leaders of the dental profession. Throughout the whole practice of surgery, major and minor, ignorance is closely allied to cruelty and it is impossible for a mere mechanic, however honest and well intentioned, to avoid inflicting constant pain and injury when dealing with living tissues in disease. To be honest, a mechanical dentist, or maker of artifical teeth, should proclaim himself to be that and nothing more, and he ought to refer all cases in which diseased teeth are present to a qualified man, before attempting to apply artificial substitutes. The great majority of unqualified dentists not only undertake dental surgery, but they endeavour by more or less false pretences to make the public believe them to be educated dentists. The only guarantee of education and fitness to practise is given in a licence in Dental Surgery. A man so educated could not (as I said in my last letter), unless both a stupid and heartless rogue, deal with cases in the fashion usual with unqualified pretenders. These men all sacrifice vast numbers of teeth merely decayed, which could easily be saved by scientific treatment; and they constantly leave mouths in a septic state, hurtful to health and dangerous to life, because they do not recognise and are unable to treat conditions of disease easily to be dealt with by scientific dental surgery. The only way to get the requisite knowledge and training lies through pupilage for the dental diploma, and no one without such a qualification ought to be allowed to pretend to possess it. The legislature in late years has never proposed, and probably will never again attempt, to prevent unqualified men from practising in any department of medicine or surgery. What it has attempted, and what the penal sections of medical and dental Acts were specifically designed to do, was to enable the public to distinguish between legally qualified and unqualified practitioners, to prevent the latter from palming themselves off as educated and registered men. It is in this that the Acts have failed, and here that they need amendment. That such amendment could easily be made effective is proved by the case of the lawyers, so often illustrated in your columns. It is absolutely impossible for an unqualified or even for a qualified but unregistered man to practise as a solicitor under any pretence of any kind. He cannot with impunity assume any title or use any words implying in the remotest way that he is qualified.

With regard to the charge of snobbery which "An Interested Observer" seems to make against the "leaders of dentistry in the past" for their efforts to improve the status of their profession, these men showed throughout that they recognised the fact that dentistry must always remain an inferior, if not the most inferior, department of surgery, and that the title dentist, by which practitioners, however highly qualified, would always be known could never give the prestige attached to the title physician or surgeon. Dentistry has, however, been already in some degree, converted from a more or less disreputable trade into a respectable calling which a sensitive man need not feel shame in acknowledging; and as an individual's social position depends nowadays so much more on his personal qualities than upon the prestige of his professional denomination, there need be no doubt dentistry, as it further advances, will prove sufficiently attractive to the classes from whom the great bulk of the medical profession is recruited. Dentistry is never likely to attract men ambitious for wealth, for worldly and professional distinction; and if it do not, it will not differ much from the whole medical profession. Everyone who proposes to join the ranks of the medical profession does so in the full knowledge that its members, whatever branch of practice they may take up, can have, except in the rarest instances, no hope that they will derive from the profession itself anything beyond a very modest social position, and a very moderate competency.

I am, Sir, yours truly,
A Hospital Dentist.

London, W., September 26th.

To the Editor of The Medical Press and Circular.

Sir,—The fact would be farcical if it were not so tragical that the whole fabric of medical law laboriously worked out during fifty years by medical corporations and authorities and by Parliament, and embodied in several Acts has tumbled to the ground, and that the public and the profession still remain entirely unprotected against the wiles of the small army of cynical rascaldom which finds a safe field for its operations in dentistry, as in many other departments of medcial practice. The only law of the kind that remains valid is the Veterinary Act. Convictions for falsely pretending to be qualified under that Act have been easily obtained. Unqualified men have been fined for exhibiting a sign inscribed "Veterinary Forge," or for styling themselves "Feline and Canine Specialist." These convictions, although confirmed by the High Court, have not been submitted to the final arbitrament of the House of Lords. It is very probable that that august tribunal would overthrow them, as it has overthrown convictions under the Medical and Dental Acts. The drafting of each of these Acts is almost exactly similar, and yet the House of Lords holds that a man does not falsely pretend to be registered under the Dentists Act when he advertises with use of such words as "Dental Institute," "Dentistry" and "Dental Surgery." I enclose my card and

Am, Sir, yours truly,
A Provincial Hospital Dentist.

September 27th.

TUBERCULOSIS AND THE INSURANCE ACT.

To the Editor of The Medical Press and Circular.

Sir,—Your article on Tuberculosis and the Insurance Act hits the right nail on the head. What we aim at is the prevention of tuberculosis, not its problematical cure. If the money which is to be spent on the erection of sanatoria had been allocated to local authorities for the purpose of destroying slumdom, then all thinking men would have agreed that it was a step in the right direction, and that we were treating causes, not symptoms. Suppose we have a case of incipient phthisis which is sent to a sanatorium, and is discharged therefrom as cured, which in many cases merely means that no manifestations of active mischief are present. This patient returns to a slum dwelling. How long will the "cure" last? Having obtained quiescence, we must maintain it by healthy habits and sanitary surroundings.

I should like to follow the histories of patients subsequent to their discharge from sanatoria and after they have been at home a month and returned to their usual daily routine. I fear that in many cases it would not prove a history of continued progress.

I should prefer to see £4,000 spent in pulling down insanitary dwelling houses rather than £20,000 spent in erecting an "up-to-date" sanatorium. The former would be an excellent advance in preventive medicine.

I am, Sir, yours truly,
S. J. Ross.

Bedford, September 25th, 1912.

THE GENERAL MEDICAL COUNCIL AND REGISTRATION.

To the Editor of The Medical Press and Circular.

Sir,—I shall be greatly obliged for your help in reminding the members of the medical profession of the importance of keeping an address in the *Medical Register* which will form a safe channel of communication. The onus of notifying changes lies upon the practitioners themselves, and, though every possible effort is made to remind them of this and to trace them when touch has been lost, it is often impossible to get into communication with them. Representations have been made to the Registrar General, to the Board of Trade, and to other Government Departments, with the result that the Register is officially consulted far more often than it used to be. This affords protection to the public and to the profession alike, but any practitioner who has allowed his name to lapse from the Register may find himself temporarily much inconvenienced. I shall be glad to hear from anyone who has doubts as to the accuracy of his address, and all communications will be acknowledged.

I wish also to remind practitioners that the *Medical Register* is the only official publication, and that the entry of a name therein alone confers any legal privileges: it should not be confused with any of the directories which issue circulars every year.

I am, Sir, yours truly,
Norman C. King,
Registrar.

General Council of Medical Education and Registration of the United Kingdom,
299, Oxford Street, London, W.
September 25th, 1912.

THE SPREAD OF SUPERSTITION.

To the Editor of The Medical Press and Circular.

Sir,—Under the above heading the *Times* of to-day, September 24th, publishes an interesting leader, an article with certain first-rate scientific and literary qualities of a kind such as to say the least are not common in other daily papers. The article opens with the statement that "it is good news that the police are about to do what they can to suppress fortune-telling and other practices of the same kind in London, and particularly that they will not in future allow fortune-tellers, palmists, crystal-gazers and clairvoyants to advertise in any way." A lucid examination of the psychology of the classes that provide the victims of the palmist and fortune-teller follows, and an explanation of the mischief to which they give rise; and it is pointed out that the impostor does not perhaps always know what harm he is doing. "He is not merely a symptom of a growing evil but also a cause of its increase, and should be suppressed by all possible means, and if the law at present is not stringent enough to suppress him it should be made more stringent." My object in calling attention to this article is to suggest that all its facts and arguments *mutatis mutandis* would apply to the trade in fraudulent cures and nostrums. To have a leading journal on our side in any public cause is to justify hope in success; and when the report of the Select Committee is published, we may surely hope that it will help in bringing about the alteration in the laws which in that direction have already been proved to be so urgently called for.

I am, Sir, yours truly,
London, W., September 24th. M.B., F.R.C.S.

[We refer to the subject of our correspondent's letter in our editorial columns.—Ed. M.P. and C.]

OBITUARY.

SIR HERBERT ELLIS, K.C.B.

We regret to announce the death of Sir Herbert Mackay Ellis, Hon. Physician to the King, which took place on the 30th ult. at Leavesden, The Common, Weybridge, after an illness extending over several weeks, at the age of 61. Sir Herbert Ellis was born in 1851, and was educated at St. George's Hospital, qualifying as L.R.C.P. and M.R.C.S. in 1873. He was elected an Honorary F.R.C.S. in 1906. He joined the Medical Department of the Navy in 1875, and served with the battalion of Royal Marine Artillery throughout the campaign in Egypt in 1882, being present at the engagements at Kassassin and Tel-el-Kebir. He was mentioned in despatches, promoted to Staff-Surgeon, and received the medal with clasp and the bronze star. In 1893 he was Fleet Surgeon on Board the *Victoria*, which was sunk in collision with the *Camperdown*. In 1904 Sir Herbert was appointed Inspector-General of Hospitals, and from that year to 1908 was Director-General of the Medical Department of the Navy. He was created a Knight Commander of the Order of the Bath in 1907. He was also J.P. for Carnarvonshire.

REVIEWS OF BOOKS.

CLINICAL IMMUNITY. (a)

Dr. Matson, in his preface to the English translation of Dr. Wolff-Eisner's little book, states as a reason for his task that he was struck by the clear and precise manner in which the author presents the difficult subject of immunity. His readers will agree with this judgment, and may add that the clearness and precision have lost nothing in the translator's rendering. It is not, however, merely his treatment of a difficult subject that makes Dr. Wolff-Eisner's work valuable, but the fact that he approaches it from a somewhat unfamiliar standpoint. Most discussions on immunity, as is but natural, are written from the point of view of the laboratory worker. In this book, however, we view it from the clinical aspect. As a consequence, the volume will be found interesting by those who are quite unacquainted with laboratory *technique*. Moreover, it can be read with understanding by any medical man of ordinary experience, even without any previous familiarity with the subject.

In the first place, Dr. Wolff-Eisner explains the meaning of the terms infection and virulence. He then briefly sketches the various theories of immunity. He tells us that he has been criticised for devoting so much space to the subject of hypersensitiveness. In this criticism we cannot join. "We are," he rightly says (p. vii.), "at the beginning of an era of clinical research based on the laws of hypersensitiveness." So true is this that already much of what he has written on the subject is out of date. He holds that hypersensitiveness is a vasomotor phenomenon, but this is only true in part. There are, as Auer has recently shown, many forms of anaphylaxis. A rabbit, for instance, dies of rigor of the heart-muscle, but the heart of the guinea-pig is unaffected, its death being due to stenosis of the finer air-passages of the lung. A dog suffers from neither of these conditions, but dies from a fall of blood-pressure. Nevertheless, though Dr. Wolff-Eisner's discussion may be already a little old-fashioned, it is of great value. The reader for whom he writes was much in need of a clear summary of our knowledge of the subject, and we know of none so clear and interesting as that provided here. It is of all the greater interest in that the author has been himself one of the pioneers in this work. The clinician will read with interest his arguments to show that such conditions as hay-fever, urticaria, and eclampsia are instances of hypersensitiveness.

Dr. Wolff-Eisner devotes more space to the subject of opsonins than is usual with foreign writers. He quarrels with Wright for differentiating opsonins and bacteriolysins, but he does not really come into grips with the question The suggestion that " a distinction of this sort would make the subject extremely complicated and difficult to understand " (p. 109) is hardly adequate.

(a) "Clinical Immunity and Sero-Diagnosis." By A. Wolff-Eisner, M.D., Berlin. Translated by Ray W. Matson, M.D. Revised and Edited with a Special Introduction, by the Author. Demy 8vo., pp. xiv. and 184. London: Bailliere, Tindall and Cox. 1912. Price 7s. 6d. net.

It is in his discussion of vaccine therapy that we find Dr. Wolff-Eisner at his weakest. He limits the use of vaccines to acute localised and to chronic infections. "The application of vaccines is contra-indicated in all infectious diseases in which 'bacterial poisons,' so-called, appear spontaneously in the circulation. This precludes all possibility of applying vaccine therapy in most acute infectious diseases." (p. 143.) This is a correct historical statement of the received opinion of six or seven years ago, but it is an opinion which has long been falsified by clinical experience. But perhaps the admission of this experience would "make the subject extremely complicated and difficult to understand."

Dr. Wolff-Eisner concludes with a discussion on chemo-therapy and a chapter on salvarsan. The fact that we have dwelt somewhat on his faults makes it necessary for us to repeat that the book is thoroughly interesting and suggestive, and in the main sound. The translator has on the whole done his work well, and, for a translation from the German, the text runs very easily. A few inelegancies, such as "bacilli emulsion," might have been avoided, and the translator has not always found the word sanctioned by usage, as when he speaks of "lateral chain" for "side-chain," and "vaccination therapy" for "vaccine therapy."

MEDICAL ELECTRICITY. (*a*)

THIS work originated in the author's belief that non-medicinal methods of therapeusis do not receive either in the medical curriculum or in medical practice the attention merited by their real value. Electricity is one of the methods to which he refers, and to a consideration of its uses in medicine and to the different ways of using it his book is devoted.

The work consists of seven sections. The first of these deals with the general subject of electricity, including Electro-statics, Electro-magnetism, and Electro-Magnetic Induction. The second section deals with Electro-Physiology, the third with Electro-Diagnosis, and Electro-Prognosis. In this section due attention is paid to the use of the cystoscope, the endoscope, and the various instruments for examining the nose, throat, ear and accessory cavities. The fourth section deals with General Electro-Therapeutics, the fifth with the methods of obtaining general and local effects by the indirect action of electricity, and the sixth with Special Electro-Therapeutics. In the last-named section the effects of electricity on the different organs of the body are discussed systematically. The seventh and last section deals with the application of the Röntgen rays in medicine.

We consider that the book is a valuable contribution to the literature of electricity, and deserves a place in the library of the medical man. It fulfils its objects, and may be consulted as a trustworthy guide. It is well and clearly written and contains a large number of excellent diagrams and other illustrations.

GYNÆCOLOGY. (*b*)

IT is now many years since we first had the pleasure of seeing Dr. Lewers' work on the Diseases of Women, and we welcome with pleasure this new edition. It has been re-written and at the same time considerably enlarged by the addition of new matter and new illustrations.

The author naturally presents gynæcological practice from a thoroughly English standpoint, and although we readily admit that the English standpoint has undergone very much change in the last five years or so, and that Dr. Lewers' work reflects this change, still we cannot help thinking that there are many parts which might have been still further revised. Surely the chief objection to supra-vaginal amputation of the cervix in cervical cancer is not that it may cause contraction of the uterine outlet. Such a view is all the more strange when it follows an excellent description of Wertheim's operation, and when it is clear that the author considers the latter procedure the proper one. Similarly, although mention is made elsewhere of radical procedures for the cure of backward displacement of the uterus, no such treatment is even mentioned in the sections dealing with the treatment of this condition.

Various pessaries are illustrated and described as useful in the treatment of uterine prolapse, but the only operative procedure mentioned is colporrhaphy. The Staffordshire knot as a means of tying pedicles of ovarian tumours or the broad ligament below inflamed tubes is described, and various forms of pedicle needle are shown.

On the other hand, we thoroughly appreciate the description of Wertheim's operation for uterine cancer and the importance the author attaches to it; whilst amongst many good points in the book may be mentioned the large amount of clinical experience incorporated in it, the excellent micro-photographs—some reproduced untouched and some re-drawn, and the various coloured plates.

Much change has occurred in gynæcological practice since Dr. Lewers' manual first saw the light, and we can truly say that there are few books of its age dealing with the same subject that so well deserve a place in the library of the student of the present time.

INSOMNIA. (*a*)

IT is always a pleasure to read what Sir James Sawyer writes, and the present treatise forms no exception to the rule. We have had occasion previously to review the first edition of this helpful book, and now we gladly welcome the second edition. In the present volume we have before us the produce of the verbatim edition of the former book, together with many additions from the author's later experience.

The first clinical lecture on "The Causes of Insomnia" has undergone but little alteration. Additional material, "digested long and with care," has been assimilated into that portion which deals with treatment. Here Sir James Sawyer rightly points out that there is no "rule of thumb" cure, and gives a plain and very serious warning of the risks which attach to the administration of powerful hypnotic drugs. The habit of taking a hypnotic may very easily be formed by the insomniac, hence the patient should never be allowed to dose himself with potent sleep-producing drugs, but these should always be under the direct control of the physician. This is most sound and practical advice, but, on the other hand, we can only characterise as misleading the extravagant praise on p. 57 of *veronal*, which is mentioned on the authority of Richard Weiss, M.A., Ph.D., as having "acquired a world-wide reputation as the most harmless and trustworthy of all means for producing artificial sleep. . . ." We venture to think that this is not the verdict which has already been registered by a large number of medical practitioners and coroners. From practical experience we have seen so many untoward results follow its administration, even in moderate doses, that we prefer to class it with those hypnotics which have all been found to possess toxic effects. In a book which purports to be the outcome of the writer's practical experience we must also confess to a feeling of surprise that the opinion of a layman should be quoted on a matter which is purely clinical and not pharmacological.

Sir James Sawyer lays due stress upon the psychic causes of insomnia and gives most useful indications for treatment. One point which he makes is certainly worth remembering—viz., that "a hypnotic which may be fatal in an excessive dose may be fatal

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(*a*) "Electricity: Its Medical and Surgical Applications, including Radiotherapy and Phototherapy." By Charles S. Potts, M.D. With a section on Electro-physics, by H. C. Richards, Ph.D., Prof. of Mathematical Physics in Pennsylvania University, and a section on X-rays by H. K. Pancoast, M.D. Pp. vii. and 509. With 356 illustrations and six plates. London: J. and A. Churchill. 1912.

(*b*) "A Practical Textbook of the Diseases of Women." By Arthur H. N. Lewers, M.D.Lond., Senior Obstetric Physician to the London Hospital. Seventh Edition. Demy 8vo., Pp. xi., 540. With 258 Illustrations, thirteen coloured Plates, five Plates in black and white, and a large number of Illustrative Cases. London: H. K. Lewis. 1912. Price 12s. 6d. net.

(*a*) "Insomnia: Its Causes and Treatment." By Sir James Sawyer, M.D., F.R.C.P. Second edition Pp. 107. Birmingham: Cornish Bros. 1912. Price 2s. 6d. net in an ordinary dose in a person who takes it habitually, by a kind of cumulative effect."

BLOOD-VESSEL SURGERY. (*a*)

IT is right that the possibilities of blood-vessel surgery should be presented in book form, for up to the present the scattered publications on this subject in various periodicals have not given the ordinary surgeon a sufficiently adequate idea of methods and results. This volume deals mainly with the experimental side of the work, and gives but few details of possible applications in the surgery of man. As is well pointed out, the surgeon who undertakes to anastomose blood-vessels for the first time in a patient undertakes grave responsibility. Careful experiment is essential. The book deals first with the history of blood-vessel surgery, then with the *technique* of the various operations, and finally proceeds to treat of the results and applications. There is an interesting chapter on anæmia and hyperæmia, and a most suggestive one on alteration of the circulation in goitre. In the latter the writer concludes that when the circulation is reversed in the veins of a thyroid lobe, the ultimate result is a decrease in the size of that lobe. In histological structure it returns towards the normal, and the general symptoms tend to disappear. These results, together with a discussion on the effects of ligaturing the thyroid arteries are of particular interest. The transplantation of tissues is fully considered from the experimental side. In regard to the kidney, no permanently successful results in transplanting kidneys from one side to the other have been reported. We could wish for more details with reference to transfusion of blood and its *technique*, and a more extended discussion as to its possibilities in man; but the volume does what it sets out to do—namely, to give a *résumé* of the present condition of blood-vessel surgery in animals.

FIRST SIGNS OF INSANITY. (*b*)

THE purpose of this book will commend itself to many, and the publication of it is opportune, coming as it does at a time when public attention is more and more being directed towards the subject of insanity and the relation of insanity to the law. Nevertheless, it is not with developed insanity that this book has to deal, but with the early signs and symptoms by which the first signs of mental aberration may be detected. Already in this country there exists a mass of weak-mindedness for which little provision has been made, and the Mental Defect Bill and the Feeble-minded Control Bill before Parliament represent an attempt to remedy this state of affairs.

In many cases no treatment is adopted during the early stages of insanity—in fact, the condition is not recognised until the signs have already become well marked. The author's object is to point out that the majority of such cases are curable in this early stage, which is only "latent" because unrecognised, and that, provided the requisite care and attention during this period could be devoted to the patient, there would be no necessity for the stigma of lunacy to be incurred by admission to an asylum. Circumstances may be such that some place where the lunatic can be kept in safety is absolutely requisite, but it is not always necessary, says Dr. Hollander, to confine him in an asylum, though it is desirable in all cases to place him where he will have careful nursing and skilled medical attendance.

"It is the purpose of this book to show what insanity really is, how it can be prevented, and how it can be treated before it reaches the incurable stage." Whether the author has succeeded in the ambitious task which he has set himself is a matter about which there will be considerable diversity of opinion.

The book is written in a popular and attractive style and is printed in clear type.

MEDICAL LABORATORY METHODS AND TESTS. (*a*)

WE congratulate Dr. Herbert French on the appearance of the third edition of this popular handbook. In the present volume the author states that new methods and tests have been introduced and old ones modified. The primary object of the work, however, has been maintained, for it confines itself to chemical and microscopical methods that are of established value to medical men. As a small handbook for the medical laboratory it is, perhaps, unequalled, and Dr. French, in its publication, has earned the gratitude of both senior students and medical practitioners. It gives information in a condensed form, which is exceedingly useful for examination purposes in medicine, whilst as a book of easy reference for the medical man who prefers to do his own simple laboratory work it serves a good and useful purpose.

A SYSTEM OF SYPHILIS. (*b*)

VOL. VI. is the last of the series of the "System of Syphilis," and is written by officers of the R.A.M.C., by Medical Officers of the Navy, and one chapter by a Surgeon of the U.S. Navy. It deals, as may be supposed, with syphilis in the Navy and Army. We have had nothing but praise for the first five volumes, but unfortunately in this, the sixth, there pervades a tendency to consider venereal diseases from the moral point of view rather than from the medical and scientific side. It is a great pity, for in many of the chapters valuable information is given concerning the prevalence and treatment of syphilis in the Navy and Army. Even Sir A. Keogh, in his otherwise admirable introduction, falls into the error of saying "no invidious regulation discriminating against one sex only where both are equally guilty, if indeed the man be not often the more guilty of the two, and no discrimination between the rich and poor. . . ." What can all this have to do with the treatment and prevention of venereal disease? If the reader will turn to p. 40 he will find that the figures of syphilis in the British Army are only to be surpassed by those of the U.S. Army; the figures of the British Army are 20 per 1,000, the next on the descending scale being 16 in Austria. Lieut.-Col. C. H. Melville, the writer of this part, says a little further on, ""In the first place, England and America are the only two great Countries where some form of Contagious Disease Act or other is not in force. . . ." The chapters by the same author on the History and Epidemiology of Syphilis are excellent, but we would recommend his conclusions with regard to preventive measures as a very good sermon for a military chaplain. The chapters on the Pathology and Microbiology of Syphilis by Captain L. W. Harrison are admirable and complete. The same may be said of Major C. E. Pollock's on the Clinical Course and Treatment of Syphilis in the Army, although no mention is made of "606" or "904." The following parts, dealing with syphilis in the U.S. and the British Navies, are interesting from the point of view of statistics. The last part, on Justus' test, by Staff-Surgeon W. P. Yetts, R.N., gives a short but clear account of this aid to diagnosis.

We may conclude by saying that all the medical points in this volume are admirably set forth, but we think it a pity that many of the authors have allowed themselves to wander into the domain of the clergyman. *Ne sutor ultra crepidam.*

MEDICAL NEWS IN BRIEF.

The French Congress of Surgery.

THE 25th annual meeting of the French Congress of Surgery will be held in Paris in October (7th to 12th),

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(*a*) "Blood-Vessel Surgery and its Applications." By Charles Claude Guthrie, M.D., Ph.D. Illustrated, pp. 360. London: Arnold, 1912. Price, 14s. net.

(*b*) "The First Signs of Insanity." By Bernard Holländer, M.D., Freiburg. Pp. 347. London: Stanley Paul and Co. 1912. Price 10s. 6d. net.

(*a*) "Medical Laboratory Methods and Tests." By Herbert French, M.A., M.D.Oxon., F.R.C.P. Third edition, illustrated. Pp. 202. London: Bailliere, Tindall and Cox. 1912. Price 5s. net.

(*b*) "A System of Syphilis." By D'Arcy Power and J. K. Murphy. Vol. VI. Pp. xix. and 514. Henry Frowde, Oxford University Press. Hodder and Stoughton.

under the presidency of Inspector-General E. Delorme. The following questions are on the programme of discussions:—(1) "Diagnosis and Treatment of Cicatricial Strictures of the Œsophagus," to be introduced by MM. Guisez, of Paris, and Moure, of Bordeaux; (2) "The Clinical Indications Supplied by Radiology in Surgical Affections of the Stomach and Intestine" to be introduced by MM. Béclère, of Paris, and Mériel, of Toulouse; (3) "Coxa Vara: Its Relations with Fractures and Separations of the Epiphyses of the Upper End of the Femur," to be introduced by MM. Kirmisson, of Paris, and Froelich, of Nancy. During the Congress there will be an exhibition of surgical instruments, medical electrical appliances, dressings, etc., in the great hall of the Faculty of Medicine.

A Memorial to Lord Lister.

A memorial to the late Lord Lister is to be established at University College Hospital, and will be independent of any national or other movement that may be raised to the memory of the famous surgeon. It was in 1843 that Joseph Lister first became acquainted with the hospital and the college connected with it, taking the degree of Bachelor of Arts in the college in 1847, and then entering the hospital to complete his studies. A special committee has been formed, under the presidency of the Duke of Bedford, President of University College Hospital, and Sir John Tweedy, Consulting Ophthalmic Surgeon to the Institution, is to act as Hon. Treasurer of the fund. The exact nature of the tribute will be largely decided by the amount of the subscriptions received, but it has been suggested that either a bust or tablet should be placed in both the hospital and college.

Death under Stovaine.

An inquest was held last week at Lambeth on a patient named Harris, of Lavender Road, Battersea, who died after an injection of stovaine into the spinal cord at St. Thomas's Hospital, resulting in a verdict of death from misadventure, the jury adding that the anæsthetic was properly administered.

It was stated by Dr. C. M. Page, Assistant House Surgeon, who performed the operation, that Harris was a bad subject for chloroform or ether, and that was why the injection of stovaine was made. He told the Coroner that he had administered stovaine in 350 cases, and this was his first death. The stovaine was passed by a needle through the lower part of the spine, and it was practically a painless process. He explained that the number of deaths from failure of respiration after operations was about one in four or five hundred operations.

Another witness, Dr. R. S. Trevor, Pathologist at St. George's Hospital, said stovaine had been recognised as a suitable anæsthetic for the kind of operation performed on Harris. Ether would have been impossible in the case.

Gift of a Hospital to Chiswick.

The Chiswick District Council received a letter last week inviting them to inspect a new General Hospital which has been built and equipped by a local resident who wishes to remain anonymous, and intimating that the hospital will be open for the reception of patients on Monday. The same benefactor some twelve months ago provided a Cottage Hospital for the district and has been maintaining it ever since.

The donor purchased Roxburgh House, Chiswick Mall. This will be used as an administrative block. The hospital stands in extensive grounds some thirty yards from the house, with which it is connected by means of a covered way. The wards for men and women are on opposite sides of the entrance, and will accommodate eight to ten persons each. At the top of the building is the children's ward, in which twelve children can be accommodated.

Medical School Scholarships.

The following entrance scholarships have been awarded at St. Bartholomew's Hospital Medical School:—Entrance Scholarship in Arts, value £100, for one year, Geoffry Bourne, Highgate School; Jeaffreson Exhibition in Arts, value £50, for one year, C. M. Titterton, University College School; Senior Entrance Scholarship in Science, value £75, for one year, C. W. B. Littlejohn, New College, Oxford; Senior Entrance Scholarship in Science, value £75, for one year, C. R. A. Thacker, of Downing College, Cambridge; Junior Entrance Scholarship in Science, value £150, for one year, P. Nield Cook; Shuter Scholarship, value £50, to graduates in Arts of Cambridge, K. B. Belwood, of Pembroke College.

Children's Hospital, Temple Street, Dublin.

We are asked to supplement the notice of the Children's Hospital, Temple Street, Dublin, which appeared in our Educational Number (September 11th, p. 279), by stating that the hospital and convalescent home contain 100 beds, that in 1910, 1,164 intern patients were treated, and 17,521 extern. The Hon. Secretary is Dr. M. F. O'Hea.

St. Mary's Hospital Medical School.

The following entrance scholarships of St. Mary's Hospital Medical School have been awarded at the September examination:—University Scholarships of 50 guineas each to C. N. Williams, University College, Cardiff; C. Hope Carlton, B.A., St. John's College, Oxford. Open Scholarship of £100, P. Hughes, St. Colomb's College. Palmer Scholarship of 25 guineas, T. Morris Davies, Caermarthen Grammar School. The Epsom College Scholarship has been awarded to C. L. Mason.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

To the Editor of The Medical Press and Circular.

Sir,—May I ask you to grant me space to rectify a curious printer's error in my letter on the Position of Dentists, published last week. In the paragraph marked 2 you make me say, "A large, though a decreasing, proportion of registered men (qualified by examination) have no better qualification to practise than the . . . . unregistered," etc. The words bracketed should, of course, read UNqualified by examination. Thanking you for this rectification.

I am, Sir, yours truly,
An Interested Observer.

September 26th, 1912.

[We are, of course, pleased to insert the foregoing correction, especially as on reference to our correspondent's original letter we find the version in the *Medical Press* was literally and precisely that given in his manuscript. *Sic imprimatoris honor est redivivus.*—Ed. M.P. and C.

THE LUXURY OF A BATH.

A correspondent sends his experience to a lay contemporary when requiring a bath at Saint-Lo in Normandy, which possesses no public bathing establishment, in spite of its 12,000 inhabitants. Visitors, by a tacit agreement among the hotel-keepers, are accommodated with one litre of water a day for their ablutions, a quantity which usually suffices. Recently an enterprising traveller had the temerity to ask for a bath, and was eventually recommended to apply to the local hospital, where he hoped, as is the custom in some parts of Brittany, to be able to utilise a bath-tub on payment of a small fee. The steward of the hospital was very sympathetic, but regretted he could do nothing himself, and advised the would-be bather to write a formal letter to the administration. This was done, but the visitor heard no more about the matter, and was obliged to go back to Paris unbathed. Shortly after his return he received a letter from the hospital couched in the following terms: "Monsieur C—— will be exceptionally authorised to take a bath at the hospital, on condition that he can prove, by means of a doctor's prescription, that this medicament is necessary to his state of health."

ANNUAL REPORT OF THE N.S.P.C.C.

According to the annual report of the National Society for the Prevention of Cruelty to Children, the number of complaints received during the year 1911-12 in England, Ireland and Wales was 54,118, this being the first time since the foundation of the Society that there has been a reported decrease in complaints. Involved in the cases were 156,637 children, or 1,569 less than last year. In the 52,371 cases found to be true 47,348 cases were dealt with as warnings; in 2,356 cases prosecutions were undertaken (of which 2,295 were successful); and 2,667 were otherwise dealt with. Of the 156,637 children affected 154,387 were related to the offenders; 146,833 were legitimate (1,495 being step-children); 7,554 were illegitimate; and 2,250 children were not related to the offenders. Of the above, 77,962 were boys and 78,675 were girls.

Meetings of the Societies, Lecturs, &c.

Friday, October 4th.

West London Medico-Chirurgical Society (West London Hospital, Hammersmith Road, W.—8.30 p.m.: Opening Meeting of the Thirty-first Session. The President, Mr. G. P. Shuter, will deliver the Presidential Address, "The History of Nitrous Oxide Anæsthesia."

Appointments.

Borland, Vynne, M.B., Ch.B.Glasg., Resident Medical Officer at the Children's Hospital, Sunderland.

Chitty, Herbert, M.B., M.S.Lond., F.R.C.S.Eng., Assistant Curator of the Pathological Museum of the University of Bristol.

Coombs, Harold Martin McC., M.B., B.C.Cantab., L.R.C.P.Lond., M.R.C.S., House Physician at the Bedford County Hospital, Bedford.

Davies, C., M.B., Ch.B.Vict., House Surgeon at the Salford Hospital.

Edwards, D. R., L.R.C.P.Lond., M.R.C.S., Certifying Surgeon under the Factory and Workshop Acts for the Corwen District of the county of Merioneth.

Hay, R., M.B., Ch.B.Edin., Junior House Surgeon at the Royal Infirmary, Sunderland.

Houston, T. H., M.B., Ch.B.Q.U.I., Casualty House Surgeon at the Salford Hospital.

Kay-Mouat, J. R., M.B., Ch.B.Bristol, Demonstrator of Pathology in the University of Bristol.

Low, Herbert Bruce, Ch.B., M.D.Edin., Honorary Assistant Physician to the Children's Hospital, Sunderland.

Morris, Leonard Newsom, M.B., Ch.B.Bristol, L.R.C.P.Lond., M.R.C.S, Assistant Curator of the Pathological Museum at the University of Bristol.

Roberts, Thomas, M.B., M.S.Edin., County Medical Officer of Health of Denbighshire.

Rodger, Douglas, M.B., Ch.B.Vict., F.R.C.S.Edin., Ophthalmic Inspector of Schools to the Queensland Government.

Woolf, A. D., M.D.Brux., L.R.C.P. and S.Edin., L.R.C.P. and S. Glasg., has been appointed Hororary Anæsthetist to the Leyton, Walthamstow and Wanstead Children's and General Hospital.

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointment:—Borris (Co. Carlow).

The Hospital for Sick Children, Great Ormond Street, London, W.C.—An Assistant Casualty Medical Officer. Salary (for six months) £30, washing allowance £2 10s., with board and residence in the Hospital. Applications to the Secretary. (See advt.)

Ecclesall Bierlow Union.—Resident Assistant Medical Officer. Salary £200 per annum, with board, washing, and furnished apartments. Applications to J. E. Moulding, Clerk to the Guardians, Union Offices, "The Edge," Sheffield.

Hants County Asylum.—Third Assistant Medical Officer. Salary £200 per annum, with furnished apartments, board, washing, and attendance. Applications to the Visiting Committee, Hants County Asylum, Fareham.

Western Ophthalmic Hospital, Marylebone Road, W.—There will be several vacancies for Clinical Assistants on November 1st Out-patients (yearly attendances 30,000) are seen at 1.30 on Monday, Tuesday, Thursday, and Friday, at 9 a.m. on Wednesday and Saturday, and at 5 p.m. on Friday. Applications to H. W. Burleigh, Honorary Secretary.

Portsmouth Borough Asylum.—Assistant Medical Officer. Salary £200 per annum, with board, lodging, and washing. Applications to the Medical Superintendent

Asylums Board, Isle of Man.—Assistant Medical Officer. Salary £170 per annum, with board, furnished quarters, and washing. Applications to Henry Cowin, Government Buildings, Douglas.

Gordon Hospital, Vauxhall Bridge Road.—House Surgeon. Salary £50 per annum. Applications to C. St. Amory, Secretary. (See advt.)

Births.

Gould.—On September 14th, at Castle Hill House, Shaftesbury, Dorset, the wife of Harold Utterton Gould, M.B., B.C., of a daughter.

Kinloch.—On September 26, at "Sundridge," Lempsford Road, St. Albans, the wife of R. Blair Kinloch, M.B., of a daughter.

Roth.—On September 28th, at 8b Portman Mansions, W., the wife of Paul B. Roth, F.R.C.S., of a son, Leonard Harding, and a daughter, Vivien.

Vosper.—On September 25th, at 112 Regent's Park Road, N.W., the wife of Percy Vosper, M.R.C.S., L.R.C.P., of a daughter.

Wace.—On September 27th, at Walcote, Winchester, the wife of Cyril Wace, F.R.C.S., of a son.

White.—On September 2nd, at Mussoorie, U.P., India, the wife of Captain M. F. White, I.M.S., of a son.

Wilson.—On September 27th, at 18 College Crescent, Fitzjohn's Avenue, N.W., the wife of J. Clark Wilson, M.D., M.R.C.P., of a daughter.

Marriages.

Phillips—Dickson.—On September 19th, at Newchwang, North China, Walter Phillips, M.B., F.R.C.S.Eng., eldest son of the late Rev. J. G. Phillips, Damascus, and Mrs. Phillips, Mount Charles, Belfast, to Ethel Irene Katherine, youngest daughter of the late John Dickson, H.B.M. Consul, and Mrs. Dickson, Jerusalem. (By cable.)

Woodwark—Robinson.—On September 26th, at St. Peter's, Cranley Gardens, Arthur Stanley Woodwark, M.B., M.R.C.P., son of the late George S. Woodwark, J.P., and of Mrs. Woodwark, Croylands, King's Lynn, to Hilda Mary, youngest daughter of R. A. Robinson, D.L., J.P., and Mrs. Robinson, Putney.

Deaths

Ellis.—On September 30th, at Leavesden, Weybridge, Inspector-General Sir Herbert Mackay Ellis, R.N., K.C.B., F.R.C.S., LL.D., J.P., Carnarvonshire, Honorary Physician to King Edward VII. and King George, Director-General of the Navy, 1904-1908, also of Rhyllech, Pwellheli, N. Wales, aged 61. Funeral at Weybridge Cemetery on Friday, October 4th, at 2.15 p.m.

Gurdon.—On August 13th, suddenly, at Armadale, Melbourne, Ellen Anne, wife of Edwin Gourdon, M.D., and second daughter of the late John Randall, M.D., of London.

Mason.—On September 26th, suddenly, at Pontypool, Mon., Dr. S. Butler Mason, M.R.C.P.Edin, L.F.P.S.Glasg., L.S.A.

Terry.—On September 28th, at Ashbourne House, Wandsworth Road, S.W., William Frederick Terry, M.D., aged 77.

OPERATIONS—METROPOLITAN HOSPITALS.

WEDNESDAY.—St. Bartholomew's (1.30 p.m.), University College (2 p.m.), Royal Free (2 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. Thomas's (2 p.m.), London (2 p.m.), King's College (2 p.m.), St. George's (Ophthalmic, 1 p.m.), St. Mary's (2 p.m.), National Orthopædic (10 a.m.), St. Peter's (2 p.m.), Samaritan (9 30 a.m. and 2.30 p.m.), Gt Ormond Street, (9 30 a.m.), Gt. Northern Central (2.30 p.m.), Westminster (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Cancer (2 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

THURSDAY.—St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), University College 2 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), London (2 p.m.), King's College (2 p.m.), Middlesex (1.30 p.m.), St. Mary's (2.30 p.m.), Soho Square (2 p.m.), North-West London (2 p.m.), Chelsea (2 p.m.), Great Northern Central (Gynæcological, 2.30 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), St. Mark's (2 p.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

FRIDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Charing Cross (3 p.m.), St. George's (1 p.m.), King's College (2 p.m.), St. Mary's (2 p.m.), Ophthalmic (10 a.m.), Cancer (2 p.m.), Chelsea (2 p.m.), Great Northern Central (2.30 p.m), West London (2.30 p.m.), London Throat (9.30 a.m.), Samaritan (9.30 a.m. and 2.30 p.m.), Throat, Golden Square (9.30 a.m.), City Orthopædic (2.30 p.m.), Soho Square (2 p.m.).

SATURDAY.—Royal Free (9 a.m.), London (2 p.m.), Middlesex (1.30 p.m.), St. Thomas's (2 p.m.), University College (9.15 a.m.), Charing Cross (2 p.m.), St George's (1 p.m.), St. Mary's (1 p.m.) Throat, Golden Square (9.30 a.m.), Guy's (1.30 p.m.).

MONDAY.—London (2 p.m.), St. Bartholomew's (1.30 p.m.), St. Thomas's (3.30 p.m.), St. George's (2 p.m.), St. Mary's (2.35 p.m.), Middlesex (1.30 p.m), Westminster (2 p.m.), Chelsea (2 p.m.) Samaritan (Gynæcological, by Physicians, 2 p.m.), Soho Square (2 p.m.), Royal Orthopædic (2 p.m.), City Orthopædic (4 p.m.), Great Northern Central (2.30 p.m.), West London (2.30 p.m.), London Throat (9.30 a.m.), Royal Free (2 p.m.), Guy's (1.30 p.m.).

TUESDAY.—London (2 p.m.), St. Bartholomew's (1 30 p.m.), St. Thomas's (3.30 p.m.), Guy's (1.30 p.m.), Middlesex (1.30 p.m.), Westminster (2 p.m.), West London (2.30 p.m.), University College (2 p.m.), St. George's (1 p.m.), St. Mary's (1 p.m.), St. Mark's (2.30 p.m.), Cancer (2 p.m.), Metropolitan (2.30 p.m.), London Throat (9.30 a.m.), Royal Ear (3 p.m.), Samaritan (9.30 a.m. and 2.30 p.m. Throat, Golden Square (93.0 a.m.), Soho Square (2 p.m.).

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, OCTOBER 9, 1912. No. 15.

NOTES AND COMMENTS.

Irish Insurance Politics.

As a result of the decision of the meeting of the profession in Dublin, held recently, and reported at full in our SUPPLEMENT of last week, the medical officers of the various friendly societies operating in Dublin have given notice to their societies of the terms on which they are prepared to continue to act after the beginning of next year. The societies are proceeding to form a union so that they may decide on and pursue a common policy. Various schemes have been suggested. For instance, the societies may unite to form a central medical benefit committee which would be charged with the administration of medical benefits for all societies represented therein. It need hardly be said that such a scheme does not in itself call for opposition from the profession. Everything would depend on whether such a committee would be prepared to give terms agreeable to the profession. If not, matters would still be at a standstill. On the other hand, some of the societies speak of dispensing altogether with medical assistance, either in the way of medical benefits or of medical certificates as evidence of sickness in claiming sickness benefit. The Irish Insurance Commissioners indeed are instigating societies to rely on lay reports as evidence of sickness. This is generally regarded as "bluff," as without medical certificates the societies would be defenceless against malingering, and many of them would probably be bankrupt in a year. Out of somewhat heated controversy, however, a general feeling is growing that a settlement will be arrived at before January 1st, much on the lines suggested by the medical profession.

Doctors' Estates.

IN the columns headed "Wills Proved," which forms a weekly feature in the papers, it is not usual to find any record of the estates of deceased doctors, for the reason no doubt that the amounts in most cases are too paltry to be of public interest. Within the last week or so, however, a leading journal has thought fit to chronicle under a separate title the recently-proved wills of three deceased medical men. The average gross value of the three estates is a trifle over £3,000. These men had all enjoyed positions of great respectability if not of eminence, and one of them possessed qualifications of considerable distinction. It is possible that in publishing the paragraph in a prominent place our contemporary meant to hint at the reason why the entries of new students at the medical schools has fallen off this session—a fact commented on in the same issue. Every candidate for the profession ought by this time to be aware that the chances are that he will be called upon for a life of great self-sacrifice. He will most likely have to die "with harness on his back"; if his health gives way he may be reduced to poverty, and unless endowed with private resources will probably in the end be unable to make any adequate provision for widow and family. If to these prospects are to be added the humiliation of mean and insulting treatment by the State and public bodies, the profession must lose its attractions to all save men of peculiar temperaments. At present, thanks to the high ethical quality of the great bulk of its votaries, medicine is a profession; it will not be good for the community if it become degraded to the level of a sordid trade.

Vaccination and the Birth Rate.

IT is possible that the remarks on the above subject which Dr. R. J. Ewart is reported to have uttered in his speech at the meeting of the Eugenic Education Society last week, may have been put forth merely as not very serious *obiter dicta*, and in any case the offence is not very serious; but it seems a pity that men of authority should on any occasion give out as fact to a popular audience, any statement not scientifically demonstrable. Referring to vaccination, Dr. Ewart is reported to have said that, at the beginning of the last century approximately one out of five children was killed by small-pox. Vaccination had allowed the survival of all these children to adult and reproductive life. Small-pox took off a certain type, and as a consequence we found that the present-day population was bigger, more blue-eyed, more intellectual, more moral, less fertile, and less susceptible to tuberculosis. Vaccination was one of the main factors responsible for the fall in the birth-rate. Excepting the first, everyone of these dogmatic statements is open to controversy, and there exists not the smallest evidence in support of the last. No authority in France, where the phenomenon has been longest visible and most closely watched, and no authority in this country, ascribes the fall in the birth-rate to any other cause than the voluntary interference of parents who have become skilled in the mechanical arts of preventing conception.

Insurance without Medical Examination.

THE scheme of life insurance without medical examination is based upon a profound knowledge of human nature. For some reason or other the average candidate for insurance, no matter how robust his frame may be seized with horrid fears in the presence of the examining physician. So dreaded is the ordeal, indeed, that it is not improbable that not a few persons avoid insurance on that ground alone. So that any plan which avoids the medical examination is sure to cause a good many weak-kneed individuals to succumb to the wiles of the insurance agent. As a matter of fact, candidates who grasp at the shadow of non-medical examination find themselves in the long run burdened with its substance. The office substitute is a stringent list of questions, which the proposer is required to answer, and upon which a no less stringent scale of extra-risk premiums can be based. The actuary responsible for non-medical examinations is not likely to err on the side of leniency, as the proposer will probably find to his cost. As a matter of fact, the method is carried out at the expense of the public, which is seduced into accepting a costly substitute for legitimate medical services. The non-medical examination is widely advertised by the Sun Office, and it is a matter of some surprise that under the circumstances they are issuing to the medical profession a general appeal for support. It is impossible altogether to escape the reflection that this old-established office is thereby adding insult to injury.

Bodies for Research Purposes.

IT is curious how the prejudice against the dissection of human bodies lingers in the public mind. It is now a century since the old scandals of "body snatching" culminated in the terrible crimes of Burke and Hare, but the subsequent introduction of the Anatomy Acts legalising the use of unclaimed pauper bodies by the medical schools has not sufficed to do away with the old prejudice. Only a few days ago it was announced that, with only two dissentients, the Chelmsford Board of Guardians passed a resolution in favour of sending the unclaimed bodies of paupers who die in the workhouse to the University School at Cambridge, for experimental purposes. One Guardian described the proposal as a scandal, but others, including two clergymen, said they would be willing to leave their own bodies to be used in a similar manner. The late Archdeacon Colley left his body by will to a medical school, and it has been accordingly conveyed to the Anatomical Department of the University of Birmingham. An objection of the kind must be based on sentimental grounds. It would be interesting to learn how the dissenting Guardian at Chelmsford would relish being operated upon by a surgeon who had never dissected the human body. As well might one trust a ship to a captain who had never been previously to sea and whose knowledge had been gained solely from books.

LEADING ARTICLES.

PROVISIONAL REGULATIONS UNDER THE INSURANCE ACT.

A FRESH phase of the dispute between the medical profession and the Government over the Insurance Act has been developed by the publication of the Provisional Regulations for Medical Benefits, drawn up by the Commissioners. The advance text of the document appears in full in the *British Medical Journal* of October 5th. First and foremost, there is no mention of the scale of remuneration, so that information is yet lacking on one vital point of the controversy. It is generally understood, however, that the Chancellor of the Exchequer will be able to offer terms that may be acceptable to the profession. In October last he informed the Joint Advisory Committee that he would lay the matter before the Cabinet at the earliest possible date, and hoped to be in a position to make known their decision in the course of the week beginning October 14th. Clearly it will be out of the question for medical men to come to any definite conclusions in the absence of information as to scale of remuneration. Otherwise there is plenty of scope for discussion afforded by the regulations, and these will doubtless be carefully considered by the State Sickness Insurance Committee, upon whose findings the Council will proceed to draw up a report and ascertain the views of the medical profession. Such a referendum could hardly be completed and answers returned by the end of October, a date that leaves an ominously small space of time for further negotiations before the coming into force of the medical benefits in January of next year. It is not easy to say off-hand how far the Regulations are likely to meet the objections of medical men. A main feature appears to be the delegation of power to local committees. So far from pursuing what appears to be the eminently sound plan of enforcing a uniform income limit for insured persons, a permissive power of fixing such a limit. It really looks as if the Government were trying to evade the settlement of this important point, but doubtless the Council of the Association will deal with the matter exhaustively. Indeed, it appears fairly evident that the Commissioners have made no attempt to meet the cardinal objections advanced by the British Medical Association on behalf of the medical profession. The Commissioners seem to have acted on the general principle that all matters especially affecting the profession should be handed over as far as possible to the administrative mercies of the local or county insurance committees. During the next few weeks the Regulations will be duly considered and reported upon by the Association Council, and together with the proffered scale of remuneration, will form the subject of a momentous appeal to the Divisions. Perhaps the most encouraging feature of the present position is the tolerable certainty that Parliament will be asked by the Government to provide an increased contribution from the State to the insurance fund. In this connection we note that it has been announced, apparently on good authority, that Mr. Lloyd George will ask Parliament to grant a million pounds in order to pay an increased amount to the medical profession. Should that be the case it follows that the money will not be voted by the Commons unless a final agreement has been formally ratified with the British Medical Association, which in this instance is acting for the profession as a whole. At this juncture it is not remotely unlikely that the partial concession of the medical demands may turn the scale in favour of settlement, especially if there be an accompanying promise on the part of the Chancellor that a revision of the whole matter be placed in the hands of a Select Committee. These rumoured concessions certainly offer a better prospect of satisfactory compromise than has been in sight for many months past. The time available for discussion, however, is growing parlously brief. In spite of his well-tried courage, we doubt if Mr. Lloyd George would care to face a general election in teeth of the active hostility of practically the whole profession. Nor can we believe that he seriously contemplates risking anything of the kind. We are told that he is yet on the threshold of his great social reforms. Surely it is a poor wisdom that would alienate the sympathies of the medical profession, a class of men who are intimately concerned in the prevention of disease and the prolongation of life, principles which lie at the foundation of all human progress.

THE POSITION OF DENTISTRY.—II.

The correspondence so far evoked by our article on unqualified dentistry has been so far of a vigorous kind. Perhaps the point of most significance is the assertion that the attempt to rouse the dental profession to anything remotely resembling strong concerted action is—as one writer says—"like flogging a dead horse." In that particular we fear the dentists fail along with their allies, the medical profession. The real meaning of this professional inertia is probably to be found in the absurd manner in which both branches of the profession stand in relation to the General Medical Council. That body takes their fees, regulates their course of study and examinations, enforces a domestic discipline which is lax as compared with that of the medical practitioner, and furnishes no help in the battle against unqualified dentists. Had the dentists a governing body worthy of the name, one that would discharge adequate defensive as well as disciplinary functions, their position would be greatly strengthened and the present *laisser faire* attitude would probably never have arisen. In fact, reform of the General Medical Council is required to protect the legitimate interests of the dentists, just as much as those of the medical profession, and, last, but not least, of the outside public. When the present Insurance Act troubles are over it may be hoped the medical profession will use their newly-found unity in endeavouring to provide the General Medical Council with a new constitution more in accordance with the spirit of modern times. It is certain that such a Council, elected upon a franchise really representative of the medical practitioners rather than of the State and of selfish corporations, would be likely to make strenuous efforts to lessen the volume of unqualified practice against which legally qualified practitioners have now to contend. Or, should they find the powers of the Council unequal to the discharge of the proper duties of such a body to its constituents, it would press for statutory reforms whereby the desired additions could be made. Meanwhile the position of the duly qualified dental surgeon is not altogether an enviable one, chiefly by reason of the lack of protection against unqualified competition. Surely the State that exacted a long and costly course of education and examination in return for his diploma should protect him in the full enjoyment of the titular and other rights inherent to his status as a duly qualified practitioner. In later articles we hope to deal with the many important points involved in this discussion, for which purpose we hope to be favoured with the views of many leading dental surgeons in various parts of the United Kingdom. It is only by arousing a general interest that the matter is likely to be brought home to those authorities from whom the initiative must ultimately be sought. The journals devoted to the interests of the dental profession could hardly find a sounder objective for their energies than the reform of the General Medical Council.

CURRENT TOPICS.

The London Medical Exhibition.

The Eighth London Medical Exhibition, organised by *The British and Colonial Druggist*, was held last week at the Royal Horticultural Hall, and it was a greater success than ever. The large number of medical practitioners who availed themselves of this unique opportunity for the leisurely inspection of every conceivable variety of medical and pharmaceutical novelty were amply rewarded for the time so spent. The practical exclusion of the general public served to confine the attendance strictly to the profession, the members of which could not fail to appreciate the excellence of the arrangements carried out by the organisers for their comfort. The practitioner who wishes to keep himself absolutely up to date can ill afford to miss the opportunity thus presented of seeing, in an outward and visible form, the advances made by the various ancillary sciences of medicine, and especially in pharmaceutical therapeutics. It is, indeed, a great achievement to collect together under one roof all the latest devices known to physiology, chemistry and pharmacy, in so far as these can minister to the special requirements of practical medicine and surgery, and yet this was done, and with conspicuous success, at this exhibition. It is gratifying, too, to note that the organisers have been recently appointed to undertake the complete control and management of the Exhibition to be held in London next year in connection with the 17th International Congress of Medicine, and we wish them all the success that they deserve in this most important enterprise.

Medical Treatment of London School Children.

The Board of Education and the London County Council have now formulated the scheme, the inception of which was notified in these columns some time ago, for providing treatment for London school children. It comes into operation at once. Medical treatment centres are to be maintained by local committees of practitioners at Fulham, Hackney, Lewisham, Islington, Peckham, St. Pancras, Poplar, Blackfriars, Lower Sydenham, Norwood, and Wandsworth. The Council will be responsible for control of the arrangements for supplying the centre with patients and for the supervision of the work generally. The centre will also be available for use in the medical inspection and re-examination of children. The classes of cases to be dealt with will include eye, ear, nose, and throat cases, ringworm cases for X-ray treatment, and minor ailments. The staff are to be selected by the Council from the local practitioners. Payment will be made of £50 a year for each practitioner or anæsthetist working one half-day a week, and a capitation payment of 2s. for eye, ear, nose and throat cases, 7s. for X-ray treatment of ringworm cases, and of 4d. for the treatment of minor ailments. A nurse will be provided to be in attendance while treatment is being given and for home visiting. The work will be under the supervision of the school medical officer of the Council. Under the arrangements for "following up" already in force all children should now receive treatment for defects disclosed at the inspection. We shall watch with sympathy the carrying out of this promising experiment, and report its progress in due course. It seems at least to promise fair treatment to the doctors, a necessary requirement for success.

Preservatives in Milk and Cream.

The finally revised milk and cream regulations, which were described in these columns some months ago, came into force with the beginning of last week. The use of preservatives in milk is forbidden, and in cream restricted. This applies to condensed and dried milk, but as the term "preservative substance" does not include sugar, the traffic in condensed milk will not be interfered with. The regulations permit of the use of preservatives only in cream which contains 35 per cent. or more by weight of milk fat. One effect of this will in all probability be to raise the general standard, for the fact that a receptacle is labelled "preserved cream" will be direct evidence that the cream is up to the standard. The three preservatives not banned are boric acid, borax, and hydrogen peroxide. The proportions in which they may be used are not defined, the limit of 0.1 per cent. by weight at first laid down having been withdrawn. The Report of 1901 recommended that only boron preservatives should be allowed in cream, in an amount not exceeding 0.25 per cent., so that the final regulations do not follow precisely the recommendations of the committee. It is provided that all receptacles containing cream preserved with borax or boric acid shall be labelled conspicuously "preserved cream," and that the label shall bear a statement of the maximum amount of boric acid contained. Competition will serve the purpose of keeping down the percentage, while there are other means of checking the use of preservatives to such an extent as would be liable to endanger the public health. The amount of hydrogen peroxide used as a preservative need not be stated, but the label must bear the word "peroxide." These regulations may do some good, but evidently can effect nothing towards prevention of the traffic in "dirty" and tuberculous milk and cream—a question of infinitely greater importance.

London Sanatoria.

At the meeting of the Metropolitan Asylums Board on Saturday last, it was stated that the Board was willing to provide sanatoria accommodation and was prepared to place at the disposal of the authorities some 800 to 1,000 beds, the number corresponding to the requirements laid down by the Departmental Committee. A conference of representatives of Metropolitan boroughs had been held, twenty-four being represented, and they unanimously came to the conclusion that the Board was the proper authority to deal with the matter. From the point of view of London this is an extremely important question, and one which involves not only the better treatment of tuberculosis, but also the question of expenditure. In the 16th section of the Insurance Act, sub-section 8, there were the words "other than Poor-law authorities." That is the difficulty in which London is placed owing to its improper inclusion in the Act. Those who legislated never recognised what the government of London really is. London has at its disposal practically 1,000 beds for the treatment of tuberculosis cases in admirable institutions, under the administration of experts who have been for years devoting their time and attention to the subject, but London is debarred from accepting that advantage by this unfortunate clause in the Act, and the metropolis is therefore faced with the possibility of an enormously wasteful expenditure.

Retaliation.

When the spirit of revenge fastens on a man much evil may result, but when a body of men are affected by its influence there is a tendency to senseless retaliation which does no good to those who are guilty of it, and no harm to the objects of their displeasure. A resolution of which notice was given at a recent meeting of the Guardians of the North Dublin Union is worth quoting in part because it is entirely and irrationally revengeful, and can in no way tend to produce any good. It ran: "That in consequence of the action of the Dublin Medical Committee in refusing medical attendance to members of friendly societies, or other such bodies, and excessive demands made by that committee, it is hereby directed that a notice be inserted in the newspapers and hung up in the various dispensaries intimating the hours of attendance of the doctors, also the name and address of each guardian and warden from whom tickets may be obtained." So far the object of the resolution is to harass the dispensary doctors by making them attend those members of friendly societies who can obtain red tickets. One can see some spark of reasoned retaliation in this, but we are absolutely at a loss to see the relation of the next clause either to doctors or the societies. It is proposed that all unclaimed bodies in the workhouse should be buried and that none should be sent to the schools of anatomy. This would simply mean that students would be more ignorant of the groundwork of medicine and that the public would suffer in consequence. It would not stop the education of medical students, and if it did, it would only increase the power of existing members of the profession. The Guardians could do the Dublin practitioner no greater service than that of cutting off the supply of young doctors. Acting on the general principle of revenge without regard to the individual a proposal is made to break the contracts of all those doctors in the employment of the Guardians who are associated with the Medical Committee. The suggestion that those medical men who are in receipt of superannuation should be deprived of their livelihood if they have anything to do with the Medical Committee is too silly to call for comment.

The Disposal of Human Excreta.

When we have grown accustomed to the use of a certain method of doing anything, we somehow begin to imagine that that method, if not ideal, is at any rate inevitable. The present method of removing human excreta—by water carriage—though it has only been in use about a hundred years, seems almost to have become part of the order of Nature. We are all used to it and the enormous capital sunk in the sewers will prevent any change for many years, and even then there will have to be some overwhelming advantage shown on the side of the innovation that will make its advent irresistible. The water-carriage system has undergone yearly improvements till it now seems very satisfactory, but really it has many objections that are discernible without much labour. Rivers and other watercourses are polluted. Each time a closet is flushed the use of some four or five gallons of water is entailed, and this steady use every day for each member of the community must represent an enormous annual sum in a large city. Moreover, valuable fertilising material is wasted, and in a land where the population is so greatly in excess of what the land can support this is especially serious. Agricultural experts state that the wheat crop could be increased by anything up to 100 per cent. by improvements in the method of tillage. To do this the farmer would require all available fertilising material, and the disposal of excreta for agricultural purposes should be an enormous gain. We have before now called attention to the unsatisfactory nature of the so-called sanitary arrangements on trains. The fæces are discharged through pipes which are invariably filthy and, from their design almost impossible to clean, direct on to the track, where they are scattered by the four winds of heaven to their ultimate rest, disseminating typhoid, dysentery and what-not far and wide. It is appalling to think of the results of the defæcation of a typhoid-carrier in one of the many trains that run alongside the rivers and reservoirs which supply us with drinking water.

The Bath.

The bath as an instrument of treatment does not nowadays receive the attention it deserves. It is assumed, erroneously indeed, as has been shown, that we all take our morning tub, but beyond regulating this matter of routine few physicians take the trouble to prescribe to their patients the exact how, when, how much, and what sort of bath for each individual case. This is, perhaps, a reaction from the somewhat excessive prominence given to the bath in a previous generation. It is right, however, that the problem of the bath should be again put before use, and we are glad to find the task undertaken by Dr. Oscar Jennings, of Paris. In a neat booklet (*a*) he traces the history of the so-called Turkish bath from the earliest times, and discusses its hygienic and therapeutic applications. He himself for more than a quarter of a century, takes his bath every day, as a matter of hygiene, when circumstances permit, and he tells us of many distinguished Parisians who have the same habit, and who regard the bath as the safeguard of their health. It is curious how widespread throughout the world at one time was the system of hot baths. Nevertheless, the virtues of the Turkish bath had been forgotten, when, in 1850, Urquhart published his book on the subject and Dr. Barter opened his establishment at Blarney, the first of modern "hydros." Dr. Jennings is a firm believer in the virtues of the bath, not only in the case of the bodily ills often treated by its means, but in the case of various neuropathic or psychopathic conditions. His readers will find not only much to instruct, but much to entertain, them in his little book.

Individualism and Socialism in Medicine.

The Insurance Act has brought to a head the feeling that something is amiss with the economics of medical practice. Doctors are overworked, their pay is inadequate, and this state of affairs is unhealthy for both profession and public. Two solutions are on the *tapis*. First, the individual practitioner, competing for his bread among a crowd of keen opponents, under conditions which tend more and more to commercialise his calling, and second, a national medical service, paid by the State, the members of which could give adequate time to each case without a haunting dread of not being able to pay for bread and butter. At first sight the "socialistic" scheme presents great and obvious attractions and the success of its practice among soldiers, criminals and paupers—who receive competent medical attendance as a right—seems to sweep away all objections. These analogies, however, are misleading. In the classes mentioned the doctor has all the forces of law and order to help him in carrying out his directions, and the patient with whom he has to deal differs greatly from the average of private practice. We all agree now that suggestion has a definite therapeutic

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(*a*) "Le Bain Turco-Romain." Paris; Vigot Freres. 1912.

value, and confidence in the physician is a prime factor in producing the state of mind conducive to a successful issue. It will not do to plant a doctor in a district and bid all consult him, and without some such compulsion it is hard to see how a public service could be managed without unduly penalising the more popular men. Probably it is along the present individualistic lines that we shall find economic salvation. The present firm stand against the Insurance Act has efficiently checked a custom fraught with untold evil for a large section of the medical community. If the practitioners in each district can come to some agreement to avoid cut-throat competition the profession will soon right itself, and the survival of the fittest will continue to be the order of the day. It should not be past hoping for that eventually the successful man will be able to give himself the luxury of a little leisure, and the less fortunate brother receive at least a competency.

The Fallacy of Statistics.

A current newspaper correspondence on "Tuberculosis and the Milk Supply," although it has drawn communications from many authorities, has produced no facts new to medical readers. It has, however, elicited from Miss E. M. Elderton, of the Galton Laboratory, a letter which well deserves notice. The letter forcibly illustrates once more the fallacy of statistics. It suggests, again, how easily in the hands of an expert, when influenced by conscious or unconscious bias, statistics can be used effectually "to prove anything," whilst in many cases they can serve only to bewilder and mislead the simple reader. Miss Elderton suggests that it is fair to suppose that the sterilisation of milk should lessen the death-rate of infants (*a*) from digestive causes; (*b*) from tuberculous diseases; and (*c*) from infectious diseases. She then gives the statistics of Glasgow, and from these proves that in this city at any rate the sterilisation of the milk did not reduce the relative proportion of the infants dying from these three classes of diseases. She then turns to the much more ample data provided by the medical officer of health for Rochdale, Dr. Anderson. Here Miss Elderton deals only with non-breast-fed babies, and gives the percentage death-rates in the cases of each method of handling milk during 1909 and 1910 among infants using cow's milk in the first year of life. The statistics show that for both years the boiled-milk babies did much worse than the others. But in 1909 the "No treatment" babies were sensibly better and in 1910 sensibly worse than the sterilised. The total death-rate of babies fed with cow's milk in 1909 was 12.1 and in 1910 12.0 per cent. If we argue from 1910 we must advocate sterilisation, if we argue from 1909 we must say no treatment is the better. In 1909 13.3 per cent. of non-breast feeding mothers used no treatment of the milk. In 1910 only 4.2 per cent. of such mothers used no treatment. Miss Elderton points out that the "no treatment" mothers would surely be the careless mothers, the mothers of bad habits, whose infants have an excessive death-rate, and that this factor does not appear in statistics. She urges that we are at present ignorant whether sterilisation is or is not an advantage and that no crude statistics which leave out of account the health and habits of parents will provide any final answer. The mother with bad health and bad habits will adopt no treatment as the easier course; the real problem is whether mothers of equally good health and equally careful habits have a higher or lower death-rate of their babies when using raw or sterilised milk.

PERSONAL.

Sir Anthony Bowlby, C.M.G., opened the St. Mary's Nursing Home at Chiswick yesterday.

Dr. W. H. Parkinson has been appointed Assistant Medical Officer of Health to the School Medical Officer for Norfolk.

Mr. Frank R. Seager, L.R.C.P. and S.Edin., has been appointed Honorary Assistant Surgeon to the Warrington Infirmary.

Dr. M. Cohen, Resident Medical Officer at the Hull Workhouse, has been appointed Senior Tuberculosis Officer to Hull.

Dr. Christian D. Maitland, of Aberdeen, has been accepted for foreign service by the Women's Mission of the United Free Church, and she sails for Rajputana on the 12th inst.

Sir James Goodhart, Bart., M.D., LL.D., will deliver the Harveian Oration at the Royal College of Physicians of London on St. Luke's Day, October 18th, at 4 o'clock.

Dr. Frederick Taylor will deliver the opening lecture at the Hunterian Society, London Institution, Finsbury Circus, to-night, at 9 p.m., taking for his subject "Sleepiness."

Mr. James Lochead, Edinburgh, has been appointed Colonial Surgeon at Gibraltar. Mr. Lochead has held a number of surgical appointments, including that of Clinical Tutor in the Royal Infirmary.

Dr. Seymour Taylor will deliver the opening address at the West London Post-Graduate College, West London Hospital, Hammersmith, on October 14th, at 5 p.m., the subject being "Medical Education, Then and Now."

Sir J. Rose Bradford, M.D., will deliver the opening address at the North-East London Clinical Society, Prince of Wales's Hospital, Tottenham, N., on Thursday, October 10th, at 4.15 p.m., the subject being "Science and the Practice of Medicine."

The Directors of the Sick Children's Hospital, Edinburgh, have appointed Dr. Porter as Physician for Diseases of the Ear and Throat to the Institution. The position is a new one, as hitherto ear and throat diseases have been dealt with in the ordinary medical and surgical wards and out-patient departments.

Dr. B. P. Watson, Edinburgh, has been offered, and has accepted, the post of Professor of Obstetrics in the University of Toronto. Dr. Watson is one of the most brilliant of the younger generation of obstetricians in Edinburgh, and while regretting his departure, his many friends congratulate him and his new University on the appointment.

A CLINICAL LECTURE

ON

THE DECOMPRESSION OPERATION FOR CEREBELLAR TUMOUR.

By ADAMS A. McCONNELL, M.B., F.R.C.S.I.,

Assistant Surgeon, Richmond Hospital, Dublin.

Palliative measures are at once the glory and the reproach of surgery; the glory, because pronounced relief of symptoms may be obtained when all hope of radical cure has been abandoned; the reproach, because too many surgeons are inclined to perform palliative operations when the true interest of their patient lies in complete extirpation of the disease. Notwithstanding this, the surgery of the relief of symptoms is not practised to-day as much as it should be, and it is certainly not applied as early in the case as common humanity demands. We all remember patients suffering from malignant stricture of the œsophagus who have been subjected to slow starvation for months, before, moribund, they are afforded the relief consequent on a gastrostomy. Medical men are beginning to appreciate the benefits of early gastrostomy and early colostomy in inoperable tumours of the œsophagus and rectum respectively, and each of us has met with cases in which our palliative measures either proved curative or transformed an apparently inoperable cancer into an operable. The wider adoption of such operations as the two mentioned has depended largely on their intrinsic safety and on improved methods of their performance. When we consider the palliative operations for lesions of the brain and spinal cord we find that they are attended by a relatively high mortality, and that some experience in the surgery of these regions is necessary for their success. The principal cause of their limitation is, however, the general want of appreciation by the profession of the immediate benefits and the possibilities of cure which are their attendants. This case, to which I am about to direct your attention, is a good illustration of the truth of what I have just said.

The patient, Mrs. C. M., æt. 40, was admitted to the Whitworth Hospital, under the care of Dr. Travers Smith, who transferred her to the Richmond Hospital for surgical treatment. She complained of severe headache, impaired vision and increasing difficulty in using her right arm and leg. She stated that on several occasions when about her ordinary household duties, she was overcome by a sudden giddiness, in which the room seemed to whirl round her, and which made it impossible to stand on her feet. She usually vomited and momentarily lost consciousness during these attacks. Since admission to hospital she has had several attacks of vertigo, but as she has been confined to bed we can form no judgment of its effect on her equilibrium. The headache was frontal and of extreme severity; it came on at various hours during both day and night, and was only relieved by morphia. The chief cause of anxiety to the patient was the diminishing power of vision. When she came under observation the left eye was absolutely blind, but she could see fingers at a distance of one foot with the right. The right pupil was normal in size and reacted to light, whereas the left was moderately dilated and showed no reaction. There was some power of accommodation in the right eye, but none in the left. Ophthalmoscopic examination revealed the presence of double choked disc, worse on the left side. The patient had had attacks of vomiting, which occurred without relation to the taking of food and without any premonitory nausea.

She walked with a shuffling, staggering gait, but did not show any tendency to fall. As a rule her course deviated to the left side, but on one or two occasions she walked towards the right. She could stand quite steadily with the heels together and the eyes closed. Examination of the motor mechanism elicited no loss of power of the right arm and leg, nor was there inco-ordination of any of the arm muscles. The knee-jerks were slightly increased on both sides. Ankle-clonus and Babinski's sign were absent. Kernig's sign was present on both sides. The head was held direct and did not incline to one side more than to the other. Tactile sensation was somewhat diminished over vague areas of the lower limb, and the power of localisation of sensations considerably less than normal.

The presence of double optic neuritis, the non-reacting pupil on the left side, and a ringing sound in the ear, designated by the patient "the dead bell," indicated the involvement of the second, third, and possibly the eighth cranial nerves, while the other cranial nerves were apparently normal. During her fourth week in hospital the patient became subject to tetanic-like seizures, in which the muscles were rigid, the teeth clenched, and the lips covered with froth. In each of these attacks she frequently sneezed. Each fit lasted for about two minutes, and then passed away leaving the patient in an exhausted condition. Her general mental state was depressed, and she lay in bed in a stuporose condition, from which she could be easily roused. She never spoke spontaneously. Pulse, temperature and respirations were normal.

There is nothing of note in the family history, nor is there any clear indication of syphilitic infection.

With regard to the diagnosis, as there were well-marked and obvious headache, vomiting, optic neuritis, and lowered mentality, which are the cardinal symptoms of intracranial tumour, such a general diagnosis was unavoidable. The localisation of a tumour inside the skull is, however, a much more difficult matter, for we must distinguish between those symptoms due to the local effects of the growth, and those due to involvement of other portions of the brain by the increased intracranial pressure. There were in this case, however, two symptoms, namely, vertigo and staggering, which pointed to the cerebellum as the site of the lesion. I need not mention the numerous disorders of various regions of the body that may produce vertigo. It is not on one symptom nor on two that we diagnose a lesion of the cerebellum, but on a definite symptom-complex which reveals intracranial compression with general indications of cerebellar affection.

In addition to vertigo and ataxia the early and rapid onset of optic neuritis and the startlingly sudden incidence of optic atrophy, as evidenced by failing powers of vision, directed our attention to the cerebellum, for except in intraventricular growths there are few intracranial lesions which produce such rapid atrophy and loss of vision as is usual in cerebellar tumours. The tetanic-like seizures also sugggested the cerebellum. They resembled in no respect the epileptic attacks due to lesions of the cortical motor centres; all the muscles were thrown into tonic contraction at once, there being no sign that any individual muscular group became affected first. There were no premonitory symptoms, either subjective or objective. The fact that the patient sneezed repeatedly in each attack may have indicated some irritation of the receptor nuclei of the fifth cranial nerve or of the expiratory centre in the medulla. Such involvement of these centres was, however, in all probability due to the increased pressure, and not to the local effects of the growth. The presence of tinnitus, expressed as the "dead bell" by the patient, gave us one more symptom of cerebellar involvement, for tinnitus is a relatively common subjective sensation in these cases, and has no relation to deafness, which may or may not be present. Having arrived at a diagnosis of cerebellar tumour our next duty was to find out whether the growth lay in the cerebellum itself, or simply occupied the sub-tentorial region of the cranial cavity. We excluded extra-cerebellar tumours chiefly from the absence of involvement of the sixth and seventh nerves, and from the fact that although tinnitus was present there was no deafness. The tumours of the cerebello-pontine angle almost constantly give signs of early involvement of these nerves, as one would expect from even a cursory examination of this region of the brain. From the point of view of treatment, this diagnosis was sufficient, for it is not of great import to localise a growth accurately in any given portion of the cerebellum. Owing, however, to the optic neuritis being more marked and the loss of sight more complete in the left eye than in the right; to the left pupil being dilated and fixed; and to the patient veering towards the left on attempting to walk, we came to the conclusion that the tumour lay inside the left cerebellar hemisphere.

It is usually extremely difficult to determine the nature of an intracranial growth, and as syphilitic lesions may produce all the cardinal symptoms of tumour, it is wise to put the patient on a course of mercury and iodide of potassium to see if any improvement takes place. Before this patient came under our observation she had received anti-syphilitic treatment for about six weeks without any improvement. Wassermann's reaction was negative. As a general rule, however, the multiplicity of symptoms, and their tendency to asymmetry, enables us to distinguish intracranial syphilitic lesions from true tumours. We must guard against allowing the patient to die from one disease, whilst we are attempting to diagnose another. Too often we find that the time employed in giving potassium iodide has allowed an operable cancer to become inoperable, or in the case of brain tumours it has been sufficient to kill the patient by cerebral compression before we are thoroughly satisfied that the disease is not syphilitic. It is in the highest degree irrational to leave a symptom untreated because we do not know its cause. It ought to be a rule in the treatment of cerebral syphilis to perform a decompressive operation as soon as the vision begins to be impaired. When a tumour is diagnosed, do not wait until the patient is comatose, but operate immediately. One can always relieve the compression and sometimes extirpate the tumour. When symptoms of compression are present do not attempt to relieve them by lumbar puncture, and do not employ this procedure as a diagnostic measure, because of the danger of sudden relief of pressure in the spinal canal herniating the medulla through the foramen magnum and thus producing speedy death.

The dangers of cerebral decompression have been largely exaggerated, but no matter how considerable they may be, they weigh little in the scale against the certain and immediate relief afforded by the operation. If there be no clear indication of the site of the growth, or if the hope of removal has been abandoned, Cushing's operation under the temporal muscle is an extremely satisfactory procedure, and is equally efficient in cerebral and cerebellar growths. When, however, the tumour is localised in the cerebellum and when there is a possibility of removing it, a sub-tentorial decompression operation should be performed. As soon, therefore, as we obtained the patient's consent, we removed all the bone of the posterior cranial fossa on both sides, from the superior curved line above to the foramen magnum below, and from one mastoid process to the other. The dura was found tense and bulging to a degree which was discernible on both sides but more marked on the left. The occipital sinus being ligatured and divided, a crucial incision was made in the membrane and the posterior surface of the cerebellum exposed. Gentle palpation of the cerebellum revealed a relatively firm growth in the substance of the left hemisphere. Having relieved the compression and confirmed our diagnosis, we replaced the skin and muscle flaps and sutured them in position without drainage. The mass of cervical muscles forms a particularly good support for the protruding brain. The patient made an uneventful recovery. On the day after the operation she showed more interest in her surroundings than she had evinced at any period of her stay in hospital. On the second day she was sitting up and quite talkative. It is now fourteen days since the operation and there has been no recurrence of the headache, no vomiting or tetanic-like seizures. She is now able to move about the ward and there is a decided improvement in her gait, though she has still the tendency to deviate to the left. The condition of her left eye is not improved, though the reaction to light has returned in that pupil. She can see fingers with the right eye at a distance of two feet, and light appears considerably stronger than before the operation, but it is extremely questionable whether she will ever recover sufficient vision to enable her to perform ordinary household duties. Dr. Joyce reports that there is partial atrophy of both optic nerves, and that it is more marked on the left side.

The stitches were removed on the sixth day, and two days afterwards cerebro-spinal fluid began to flow freely from one point of the wound. For several days it discharged copiously but has now practically stopped. The sinus was painted with iodine at each dressing and at no time was there evidence of infection.

Much of the difficulty and danger of cerebellar decompression is due to the congestion of the veins of the head produced by ether. So free and so difficult to control is this general oozing in many cases that several deaths have been directly due to loss of blood, and many surgeons have therefore adopted chloroform. Since chloroform lowers the blood pressure to a considerable extent, and there is a great tendency to a sudden fall in blood pressure on opening the dura, this anæsthetic has decided disadvantages. For these reasons I welcomed the suggestion of my colleague, Mr. Crawford, that we should use hedonal as the anæsthetic. Mr. Crawford administered this drug into the cephalic vein and produced a very satisfactory anæsthesia. There was no general oozing of blood; we were enabled to place the patient in the prone position, and the anæsthetist was altogether removed from the region of the operation. The fact that there was no post-operative vomiting or restlessness was of supreme importance. Judging from the anæsthesia produced by hedonal in this patient, and in another case in which I performed an osteoplastic exploratory operation for a cerebral abscess four days later, I am of opinion that this anæsthetic promises to be the safest, as it is certainly the most convenient for brain surgery. As far as I can ascertain this was the first operation performed under hedonal in Ireland, and I am greatly indebted to Mr. Crawford for administering this anæsthetic.

I am convinced that decompression operations are not performed nearly as often as they should be. Probably many practitioners are disinclined to advise them because of a formerly high mortality, and because of the transient nature of the relief afforded. With the modern instruments for brain surgery, and the increased accuracy of *technique* for which Cushing of Baltimore, and Frazier, of Philadelphia, are largely responsible, the operative dangers have become materially diminished within recent years. We must remember, however, that every day that compression lasts increases the risk of the operation, and that the chances of radical removal of the tumour depend on early attack. We do not wait for an ulcer of the stomach to perforate before we open the abdomen, nor should we wait until the patient is comatose before we look for a growth in the brain.

By operating in two stages on this patient, first the decompression, second the removal of the growth, we did not subject her to a very prolonged anæsthesia, and we certainly gave her a better chance of ultimate survival.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal The lecture for next week will be by Walter C. Stevenson, M.D., B.Ch., D.P.H., Assistant Surgeon, Steevens' Hospital, Surgeon Incorporated Orthopædic Hospital, Dublin. Subject: "Plaster of Paris in Surgery."*

ORIGINAL PAPERS.

THE "PENNY SIGNS" IN PLEURISY AND ASCITES.

By M. BRELET, M.D.,

Of the Faculty of Medicine of Paris.

[Specially Reported for this Journal.]

It is now many years since Professor Pitres, of Bordeaux, called attention to a new sign in pleurisy with effusion, based on the transmission of the sound obtained by tapping one coin on another, which he called the "signe du sou." It is as much as ever if this sign is even mentioned in textbooks, and it is but rarely taken advantage of, possibly because it emanated from a faculty far removed from the more famous temple of Æsculapius, situated on the banks of the Seine.

In a recent thesis, Dr. Janney has taken up the matter *de novo*, and makes it clear that Pitres' sign is often of the greatest assistance in the diagnosis of pleural effusion, often a matter of some delicacy. He also extends the usefulness of this sign to the detection of ascites.

To elicit Pitres' sign in a case of pleurisy with effusion, a coin is placed flat on the chest, in front, just below the nipple, and an assistant taps it with another coin, striking vertically. While this is being done the observer listens over the back and side of the thorax. If the interior of the thoracic cavity be occupied by a homogeneous medium, either solid or liquid, which conducts sound more perfectly than normal pulmonary tissue, the percussion sound is audible as a clear ringing silvery vibration. The "penny sign" is, therefore, not pathognomonic of pleural effusion, but as massive indurations of the pulmonary parenchyma are much more uncommon than pleural effusions this sign, taken in conjunction with the more or less complete series of other signs and symptoms, will, in most instances, indicate the existence of a liquid effusion into the pleural cavity. Jacobson and Dianelopoulo, in a communication published last year, state that they regard the "penny sign" as the best sign of extensive pleural effusion, and Professor Achard concludes that "this sign deserves to be employed methodically and as a matter of routine, and that its simplicity particularly commends it to the practitioner."

The laws of the transmission of sound are, of course, the same in the abdomen as in the thorax, so that Lesieur and Rebattu have extended its use to the diagnosis of the presence of ascitic fluid in the peritoneum. The patient lies on his back and a pillow is placed under the pelvis, in order to facilitate auscultation and percussion of the dependent parts. Then, in order to ascertain the mobility of the fluid, the patient is made to turn on his side, or to sit up. An assistant applies a coin over the abdominal wall, in the lumbar region, or the iliac fossa, which he holds firmly by means of two fingers. With the other coin in his right hand he taps perpendicularly on the coin, graduating the shock to the thickness of tissue to be penetrated, beginning gently and steadily increasing in strength. During this time the observer applies his stethoscope over the abdomen, at a spot exactly opposite to the position of the coin. The limit of the effusion can be determined by changing the relative positions of the coin and the stethoscope. Dr. Janney gives the results obtained by him in a number of pathological states.

Normal Abdomen.—One hears a prolonged vibrating sound, more or less resembling the metallic sound described by Trousseau in pneumothorax. Sometimes in the lower parts of the abdominal cavity the sound becomes a little muffled (wooden sound), retaining, however, in part, its metallic *timbre*. The results correspond to the theoretical data given by Pitres. When between the point percussed and the point auscultated there exists a cavity filled with gas the transmitted sound is vibrating and reinforced (the metallic sound). If there be a layer of spongy areolar tissue the transmitted sound is dull (wooden), but never in a normal abdomen do we get a silvery clear sound, the "penny sign" is consequently negative.

In obesity the "penny sign" is always negative, one gets a sound like that of bronze. In meteorism and tympanism the results are the same.

In ascites, of which the author gives 35 instances, the result in 31 cases was very obviously positive, that is to say, they heard a clear, silvery sound. In four cases it was doubtful or faintly positive. It follows, therefore, that when there is a mass of fluid between the two points the transmitted sound is clear and silvery in tone. With regard to the cases in which the result was doubtful it is to be noted that in one of them the ascites was very abundant and under great pressure, so that possibly the heightened tension hindered the transmission of the sound. In the other instances it may be that peritoneal adhesions fixed the loops of intestine, locking up the effusion into compartments and thus interfering with the production of the "penny sign." In most of these cases it was found possible, by shifting the point of percussion and auscultation, to demonstrate the limits of the effusion.

We must, however, bear in mind that the existence of any homogeneous mass between the points of percussion and auscultation yields the same result as a layer of liquid, so that the "penny sign" may be positive in presence of uterine fibroids, in pregnancy (four cases), and also in ovarian cysts.

To sum up, the "penny sign" is not pathognomonic of ascites, it merely shows the presence in the abdomen of a homogeneous medium, either liquid or solid, in an uninterrupted layer. Therefore, when the sign is positive we still have to differentiate ascites from fibroid or pregnancy, and, as a rule, this can be done by noting that, in the first case, in order to obtain the silvery tone, we have to percuss in the *lower* parts of the abdomen, whereas, in fibroma, or pregnancy, the sign is perceived when percussing over the epigastrium. The "penny sign" only having proved fallacious in four instances out of 35, Janney considers it as an excellent sign of ascites, deserving of a foremost place in the methodical exploration of this condition.

EYE-STRAIN, AND ITS DETECTION IN PRACTICE.

By SYDNEY STEPHENSON, D.O.Oxon.

"Eye-strain," a convenient modern expression, may be taken as meaning that the eyes cannot be used, as they should be in a state of health, without entailing a strain upon the muscles, intrinsic or extrinsic, of the eye, which in its turn betrays its presence by local or general discomfort. It is a matter of common knowledge that this strain is more likely to show itself among the cultivated than the non-cultivated members of society, so that the small error of refraction that would almost certainly pass without notice in an agricultural labourer might give rise to serious discomfort in a hard-worked literary man. For a similar reason, symptoms are more likely to be met with in women and children than in grown-up persons. Finally, the so-called "neuropathic temperament" is without doubt a most important factor in determining the symptom-complex of eye-strain.

That many a chronic "headache" or "neuralgia" is due to eye-strain is nowadays admitted by everybody, although there need be *neither pain nor discomfort in the eye itself*. But when we come to a multitude of other functional disorders, chief among which are chorea and epilepsy, there is no such unanimity of opinion, even among those well qualified to judge. On the one hand stand certain writers, in particular Dr. George M. Gould (*a*), now of Ithaca, U.S.A., who would trace almost any and every affection of the nervous system to eye-strain, while others see in the relief of this or that symptom by weak glasses merely an evidence of suggestion and nothing more. Does not the truth, as usual, lie somewhere between these two schools of thought?

In reference to this point, some years ago Dr. Lucien Howe (*b*), of Buffalo, N.Y., endeavoured to find out how often such conditions as tuberculosis, anorexia, denutrition, constipation, dyspepsia, chorea, epilepsy, insomnia, and so forth were due to eye-strain. To that end he issued a comprehensive circular letter to 208 medical men, including in the number 162 members of the American Ophthalmological Society. One hundred and five replies were received, but of these 34 gave no figures whatever. Seventy-one reported (at least, approximately), their total clinical experience, but of that number twenty-four alone sent complete replies of such a nature that they could properly form a part of a table of statistics. Dr. Howe estimated that the returns received from the twenty-four contributors covered some 350,000 cases in which eye-strain was a factor. Twenty of these observers had never seen a single case in which the unusual conditions mentioned in the circular were due to eye-strain. On the other hand, four of the observers had noted, apparently as the result of eye-strain, the following conditions:—chorea (one case), epilepsy (five cases), and insomnia (twelve cases).

In view of the foregoing figures, Dr. Howe was amply justified when he concluded:—"This large experience shows beyond question that in the future it will be impossible for anyone to repeat the claim that these reflexes or conditions or any of a similar kind are considered by most American ophthalmologists to be the result of eye-strain. This is simply the assumption of a few enthusiasts."

The detection of eye-strain, even by the medical man, is by no means always the simple matter that it appears to be at first sight.

Matters are simplified if a patient complains of pain at the back of the eyes, or if the latter become red and watery and uncomfortable after use, or show such obvious signs of ill-health as redness of the edges of the eyelids or repeated styes.

It is most important to bear in mind that the sufferers seldom complain of any defect in vision. Indeed, nothing is commoner, when a suggestion is made that eye-strain may be the cause of their symptoms, than for them to remark, not without a touch of indignation, "My eyes cannot be at fault, as I have splendid sight." And so, in truth, they often have. But the question is: How do they obtain it; at the expense of a strain upon their eyes or otherwise? Every ophthalmic surgeon recognises that, other things being equal, the tiny error of refraction, and not the larger one, is usually responsible for the symptoms of eye-strain. A patient affected with, say, a pronounced degree of hyperopic astigmia has never enjoyed good sight at a distance, and has learned by experience that by no effort can he obtain sharp images. Hence his complaint is not of "neuralgic headaches" or of "brain-fag," and so forth, but of defective sight. His case is very different from that of a patient affected with a quarter of a dioptre or even less of hyperopic astigmia, an amount that can be readily compensated by a continual and unequal contraction of the ciliary muscle. Such a patient may have sight that is actually better than normal, but in a neuropathic subject the strain involved may result in headache, eyeache, "neuralgia," or the thousand and one ills that may be the outcome of eye-strain.

It must be borne in mind that the conditions of clear sight in such a patient imply a constant strain upon the ciliary muscle, which never gets a rest, except when the patient is asleep. In an emmetrope, on the other hand, the eye is at rest when looking at distant objects, since the images are focussed upon the retina without the intermediation of the muscle itself. To quote the graphic words of Dr. Leonard Williams:—"The patient sees well, but in the majority of cases he does so at a cost which, physiologically speaking, he cannot afford to pay. He lives well up to the limit of his nervous income, and any slight unexpected attack will very readily project him into bankruptcy. It is when he has reached this state that he appeals to his doctor to be relieved of a headache or an attack of neuralgia." ("Minor Maladies and Their Treatment," 1906, p. 139.)

From what has been said, then, it is clear that the mere test of the relative visual acuity (in plain language, the "sight"), as carried out in the usual way with Snellen's distance types, has scant diagnostic value in these cases. In point of fact, the patient who reads the normal line when tested by those means is likely to be the very one whose general symptoms are in reality due to eye-strain, and it would be an error of judgment on the part of a practitioner to assure such a patient that his eyes were not at fault.

Again, there is the further consideration that myopic conditions, which impair the visual acuity to a relatively great extent, are not often the cause of eye-strain. Yet these are the very errors likely to be detected by the use of the Snellen types.

There is one condition in which the distance types may give us a valuable clue as to the nature of the underlying symptoms—to wit, when there is an inequality between the sight of the two eyes. It is well known that symptoms of discomfort are more likely to come on under those circumstances.

Somewhat similar considerations apply to the estimation of the muscular balance by means of the Maddox compound rods or in other ways, as by the so-called "cover-test." The primary difficulty here is to determine the normal. An imperfect muscular balance that would produce symptoms of discomfort in one individual, may exist in another without producing any symptoms whatever. The personal factor is just as important here as in the case of refractive errors. Besides, these functional anomalies, conveniently grouped, as everybody knows, under the name "Heterophoria," are intimately bound up with errors of refraction; so much so, indeed, that to-day some good authorities maintain that muscular imbalance comes from errors of refraction, and that persistent wear of correcting glasses will ultimately dissipate all the symptoms. (*c*)

It seems clear, therefore, that in order to diagnose eye-strain, something more is needed than the mere testing of sight by the Snellen types and the estimation of muscular balance by the Maddox rods.

A valuable clue is often afforded by the history. A patient sometimes volunteers the statement that his headache or what not is induced, or at all events made worse, by using his eyes, and contrariwise relieved by rest. A direct question will frequently bring out the same point. Especially characteristic are cases where patients complain that headaches are brought on by riding in the street cars or by visiting picture galleries or cinematograph shows, the so-called "panorama headache" of the Americans. Whenever a patient who is suffering from headache, "neuralgia," giddiness, loss of energy, insomnia, or so forth makes such a statement, we should at all events be placed upon our guard, and think first of the case being one of eye-strain.

Speaking generally, the pain due to over-taxed eyes is in the frontal region, often immediately over one orbit or both (Head). Thence it tends, when severe, to radiate into the temples, or, for that matter, to become general. The ocular headache is generally most marked, as might be expected, towards the close of the working day, although in a recent communication by Mr. Percy Flemming (*d*) stress is laid upon the diagnostic importance of a "morning headache." The patient wakes with the headache, which improves after breakfast, and may be absent during the day if the eyes are not much used, but will be increased or brought about by using the eyes for near work. Dr. R. W. Doyne (*e*), on the contrary, says: "It is very rare for ocular headache to persist after sleep, and the fact that it does so throws grave doubts upon the question whether the eyes are the cause of headache in that particular instance." Dr. James Hinshelwood (*f*), again, states categorically that ocular headaches are generally absent in the mornings, an observation that agrees with my own experience. Under any circumstances, however, it would probably be unwise to lay much, if any, stress upon the question of "morning headache" as a diagnostic feature. It is, I think, going altogether too far to say, as Mr. Flemming does, that unless a headache is frontal or situated above each orbit, and is present on awaking in the morning, "a surgeon should hesitate about correcting a half or quarter D of hypermetropia or astigmatism." A more rational attitude, as it seems to me, is that adopted by Dr. Leonard Williams in his useful book on "Minor Maladies and Their Treatment" (1906). That accomplished physician writes:—"Neither the distribution of the neuralgia (except that it is generally cranial) nor the type of the headache, affords any indication that it is the eyes which are at fault, so that it is all the more important to keep constantly reminding ourselves of the now well-established fact that where either of these symptoms cannot be traced to any obvious cause, eye-strain is, in all probability, the main factor in their production" (p. 140).

It is unfortunate that, by the very nature of things, we are often precluded from adopting the most certain test at our disposal as to the ocular origin of this or that symptom—namely, by the application to the patient's eyes of a weak solution of atropine sulphate. By paralysing the ciliary muscle, that drug, of course, places the eyes temporarily at rest, and if under its continued use a chronic headache, or "neuralgia," or what not, disappears, we are justified in concluding that the symptom was due to eye-strain. It is unfortunate, again, that in myopia, where the remedy causes a minimum of discomfort, manifestations of eye-strain should be relatively uncommon, and that in hyperopia, where the manifestations of eye-strain are common, atropine gives rise to maximum discomfort. In that condition, when the eyes are under the influence of atropine, reading becomes, of course, out of the question, while even distant sight is blurred in direct correspondence with the degree of error that exists. Still, I repeat that the most valuable and conclusive proof as to the ocular origin of this or that symptom is to be found in the use of a solution of atropine for a few days. I may add that the strength of the solution need never exceed one grain of the sulphate salt to one ounce of sterile water.

When we come to the detection of an error of refraction that underlies a given case of eye-strain, too much stress can hardly be laid upon the fact that the error must be diagnosed and estimated with the eyes under the full influence of a cycloplegic, such as atropine, scopolamine, or homatropine. In these cases a mere appropriation to the exact error is not enough, as it often is in hospital patients suffering from the grosser errors. If good is to accrue, the error must be worked out precisely, which, as a rule, can be done only by an ophthalmic surgeon, equipped with modern instruments, and endowed with the skill and provided with the time to use them properly. The point is all-important. As Dr. James Hinshelwood (*f*) has remarked, another reason why eye-strain as a cause of symptoms is often overlooked is because the patient is already wearing glasses, and has derived little or no benefit from them. There are many sufferers from eye-strain going about to-day wearing glasses which fail to give them relief, or who, after a trial of such inefficient glasses, have become convinced that their symptoms are in no wise connected with their eyes. Yet under a more careful system of examination these patients could probably obtain relief.

The days are now happily past when ophthalmic surgeons in this country disdained to correct anything less than one dioptre of astigmatism unless sight were impaired. The general teaching but a few years ago may be gathered by the following extract from a widely-read and popular English text-book of ophthalmology, the sixth edition of which was published in 1897:—"It is not usually necessary to correct astigmatism of less than 1 D; but exceptions to this rule are not uncommon, some patients deriving marked benefit from the correction of lower grades." A conscientious practitioner nowadays is careful to detect and to correct the smallest amount he can find, when reflex neuroses are present, and he often has his reward in the relief obtained by his patients. Speaking for myself, some of my most gratifying results have been obtained where amounts as low as 0.25 or 0.12 D of astigmatism have been neutralised by glasses. Another point that seems to me well-nigh essential to success in most cases of eye-strain is the constant use of the correcting glasses. Patients should have the difference between "rest glasses," on the one hand, and "sight glasses," on the other, very clearly explained to them, and they will not then discard as useless a pair of glasses given for the relief of eye-strain because at a distance they "can see better without than with them." To obtain the co-operation of the patient is to take a long step towards success in the treatment of the case.

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Mr. G. A. Wright, F.R.C.S., of Manchester, who is about to retire to the South of England, was entertained the other day to luncheon by the Executive Committee of Lister House, a hostel for medical students which he was instrumental in founding, in conjunction with Mr. Joseph Bell and Dr. F. Tylecote.

MEDICAL MEN AND CONTRACT PRACTICE. (a)

By HAROLD B. GRIMSDALE, B.Ch.Camb., F.R.C.S.Eng.,

Ophthalmic Surgeon to St. George's Hospital; Surgeon to the Royal Westminster Ophthalmic Hospital, &c.

Gentlemen,—It is reported—I don't know whether the story is authentic—that the great Abernethy, on some occasion similar to the present, greeted the newcomers as follows:—

"Good God, gentlemen; what is to become of you all?"

His exclamation showed that, even 100 years ago, the medical profession, in the opinion of one of its leaders, was over full, and not over paid. Unfortunately, perhaps, there is no record available to show what became of his audience; we will assume that they all qualified and lived happily ever after. Certainly his words cannot have been taken much to heart, for the number of medical men in the United Kingdom has increased and gone on increasing ever since.

You, the newcomers, are entering the profession at a moment when it is engaged in a struggle for life. The course of study is more difficult and prolonged, the methods of examination necessary to successful diagnosis and treatment are more laborious and costly, and the competition keener than ever before. Modern methods have advanced so far, that it is not possible for the general practitioner, however energetic, however capable, to carry out for himself all the investigations needful for diagnosis in certain cases; and medicine is, at last, we hope, becoming a science as well as an art.

It has been a strange spectacle which has been presented to the world during the months that have passed since the passage of the Insurance Act—a spectacle without parallel in the history of medicine. We have seen the united profession—united more completely than ever before—standing firm together in their resistance to an Act which professes to carry out the work which is specially the province of the profession, viz.: to provide benefits which it is the boast of our profession to give freely to all, very often without thought of reward, seldom with an adequate one. It is indeed a strange spectacle, and the profession must have been sorely tried before they rose, almost unanimously, in protest against such an Act.

We are told almost daily by one section of the Press that we are employing the worst methods of Trades Unions, that we have adopted all the vices of Syndicalism, and none of the virtues, if it has any; that we have forfeited the right to the name of a generous profession. Now, however much some of us may regret the conduct of this dispute between the Government and the profession, however much small incidents may distress us and rankle in our minds, there can be no doubt that, on the main questions, the medical profession come out with clean hands. We are certainly not on strike, for what is a strike? When the coal miners struck, coal went up to such price that the poor were unable to buy it at all and the rich were forced to economise. When the taxi drivers came out, taxis could hardly be procured. But there is no evidence that any medical man has refused to treat any sick person.

What is it, then, that has united the profession as it has never been united before? Why are all medical men throughout the country breaking away from all their natural instincts, unwilling to take service under the Act? To explain this it is necessary to go into a piece of somewhat ancient history. We must examine the origin of clubs and voluntary hospitals, and so discover the reasons why the terms of the Act are so little to our taste.

It is, in a sense, our own fault that our services are regarded as of so little value. It goes back to the commencement of medical charities. All clubs had their inception in so far as the medical benefits were concerned, in the charitable work of medical men. When, about the beginning of the last century, or earlier, the difficulty of the medical treatment of the thrifty poor was recognised, a species of insurance was started so that the cost of an illness might not cripple any one individual, being spread over many. Medical men, altruists by training, were willing to give their services to these clubs for little or nothing. It was recognised that the work was a form of charity, and it was not pretended that the fees received by the medical men were in any degree adequate reward for the services rendered, but were to prevent them from being largely out of pocket by their kindness. Many such clubs in the country have been run by my personal friends, who were out of pocket at the end of each year, but were content to continue their charitable actions, knowing how great was the value of their services to the poor.

Another form of contract practice is not uncommon in some parts of the country, especially in the colliery districts. Here the medical officer is the servant of the colliery, and the manager deducts an amount varying with the weekly wage from the pay of each collier.

Thus a roughly equitable scale is worked; a man earning £1 a week or less pays 1d., and for each £1 or fraction of £1 he pays another 1d. In this way the collier whose total earnings average £156 (£3 a week) will pay 13s. a year for his doctor. This sliding scale is in accordance with the usual medical practice to charge according to the capacity of the patient. When the large friendly societies began to cater for the same medical benefits, they were able to point to the small honoraria accepted by the medical officers of these clubs, to induce men to undertake their seemingly similar duties for the same insufficient payment.

The astute business men who were in charge of the clubs pointed out to the young practitioner how valuable was the advertisement and introduction which followed his acceptance of the club terms, and were usually able to persuade him to come to an agreement. The terms were absurdly low; some clubs even made money out of their medical attendants, that is, they levied a certain sum, say 1d. a week, from each member, and paid the medical man 3s. or 3s. 6d. a year, saving the balance for other uses of the club. If no local medical man were willing to take the work, they were often able to import an outsider who would take the post; and the mere hint of such a proposition would weigh heavily with a struggling man who would be called upon to face new opposition. It did not occur to the managers of the club—or at least they showed no signs of appreciating the fact—that the advertisement would have been just as good for the doctor if he were reasonably paid. By degrees, the status of the club altered; instead of being confined to the really poor, the limits were so widened that anyone was able, for the absurd pittance at which the club was started, to demand the services of the medical officer.

Men who joined poor became rich, but were still entitled to the medical benefits. Often, it is true, the more successful men, who belonged to the club, were willing to forego their benefits, while continuing their subscription for the good of their poorer brethren, and called in, when occasion required, a medical man at his usual fees. This might or might not be the medical officer of the club; but this was a purely voluntary sacrifice on their part, and though many did not demand sick pay in illness, feeling a natural hesitation to take from the club funds a few shillings a week which their fellows would know to be of small importance to them, a much smaller proportion refused the medical benefits; they were not unwilling to accept the benefits which could not so easily be traced.

No medical officer of such a society could make a living without a very large club, and, on the other hand, with a large contract practice, the number of patients to be seen was so great that the medical man could not give adequate attention to each. It was physically impossible to go carefully through all the differentia in making an investigation, and hence, since the work had to be done, it was very tempting to make a snapshot diagnosis, or give a *placebo*. In hospital practice, in the hurry of out-patient work, we are not exempt from this evil; but it is perhaps one of the chief functions of the student, to keep his teacher up to the mark.

(a) Abstract of Introductory Address to the Students of St. George's Hospital, October, 1912.

There is nothing better than a surrounding crowd of enquiring students, eager to learn and perhaps not uneager to wipe, as they would say, their teacher's eye, to keep his mind alert and his diagnosis accurate.

But there is no such incentive present with the club doctor, and can we be surprised if, overworked, underpaid, without encouragement, in some cases he becomes lazy? The wonder is rather that so many do not lose all interest in their work.

By degrees this system of clubs became so prevalent that in many large towns there were hardly any inhabitants left who were not swept into the net of the insurance companies, and thus brought into the range of medical benefits. All private practices were swallowed up by the clubs.

What wonder, then, that there came an outcry from all those most interested in the welfare of the profession, that by the contract system all initiative was being destroyed and that the medical men engaged in this work were being ruined mentally and financially by it, in the name of charity? What wonder that the men who found themselves fleeced on every side were anxious to escape from it? And yet it had some advantages. The contract system did away with the necessity for a great deal of bookkeeping, always irksome to a busy man, and at the same time there was a certain income with no risk—so far as the contract extended—of bad debts. Hence many practitioners, with wife and family dependent on them, dared not, as individuals, make a stand against the clubs. And who shall blame them?

At the time when the Insurance Bill was first heard of it was recognised by all that some system of State Insurance against sickness was most desirable. Medical men were all in favour of the idea. A workable scheme, providing a service throughout the country, had indeed been suggested by some of them, and had been tried in certain localities; medical men, therefore, taking into consideration that they would have to be the chief workers under the Act, and that they had already some little experience in the treatment of the people who would come under it, remembering also that they had protested on every opportunity against the system of contract practice, not unreasonably, expected that they would be asked through their organisations, to advise on the best methods of working. However, as I shall tell you, they were not consulted; they might have thought—since they were going to bear all the risk—that the State would deal not only fairly but generously with them.

They were doomed to disappointment; the action of the Government is barely credible, and not at all creditable.

The Bill was brought in in May, 1911. In spite of repeated requests, the Chancellor of the Exchequer saw the representatives of the B.M.A. for the first time in April. This was the only deputation from the Association received before the introduction of the Bill, and at this meeting no special opportunity was afforded to the Association for ascertaining the provisions of the Bill. Nor, apparently, was the General Medical Council, nor the Royal Colleges of Physicians and Surgeons treated with more courtesy. Presumably the Chancellor had medical advisors. Who they were has not, I think, been made known; but they certainly were not the associations of medical men, who would have commanded the respect, and been in some sense at least the representatives of medicine.

When the medical provisions were known, it was at once seen that they were most unfavourable to the best interests of medicine. In the first place, the payment was to be *per caput*. This alone must stamp any scheme as liable to failure. It is not in the interest of any man's work that he should be paid at a higher rate the less work he does. It cannot induce to keenness and initiative, if the keen man is penalised because of his keenness.

The more care taken in diagnosis and investigation, the less the reward. It must not be forgotten that investigation on modern lines costs money, and this had to come out of the funds for payment of medical men.

The Chancellor of the Exchequer has, throughout, shown himself ignorant of the first requirements of modern medicine. It is, if one may judge from his attitude, his opinion that doctors are engaged in a guessing competition, with numbered bottles which agree with the number of the disease from which the patient suffers.

Lastly, the suggested remuneration is inadequate. Of course, it is perfectly true that nowhere is it laid down in the Act what the rate of remuneration is to be; but it is acknowledged that only a certain rate is justified by the actuaries.

The Chancellor has been very generous—at our expense—to the working man in an approved society. Under the present Act the labouring man pays about ¾d. a week for his medical attention. He is often willing to pay 7s. 6d. a year for the fun of keeping a dog; it is not too much to expect that he should pay as much for keeping his health.

And, again, let me mention the case of firms who own large numbers of horses. They usually pay the veterinary surgeon a contract fee to look after them, and this is usually 21s. a head. Now a horse cannot malinger, and cannot demand unnecessary medical attention.

Or, we may look at the matter another way. The Government has been hitherto willing to pay 8s. 6d. a year for the medical attention of each employee in the Post Office, who are men of picked physique and in good health. It is not likely that the Government have been paying to the medical men who have had charge of these and other public servants, twice the value of the services rendered. Why should we be asked now to undertake the treatment of all lives—healthy and unhealthy—who are compelled by the Act to insure themselves, at about half the sum which the Government has previously thought equitable for healthy lives?

In the days when I was studying medicine at Cambridge a small book appeared which was entitled, "Fables: By George Washington Æsop," in which is contained the following passage:—

"Apologue of the Kind-Hearted She-Elephant.

"A kind-hearted She-Elephant, who was absent-mindedly wandering through the Jungle where the Spicy Breezes blow o'er Java's Isle, Heedlessly set Foot on a Partridge, which she crushed to Death, within a few inches of her Nest, filled by her Callow Brood. 'Poor little things,' said the warm-hearted Pachyderm, 'my carelessness has robbed them of their Natural Protector, but for the future my Solicitude shall replace the Tender Ministrations they have lost.' So saying, she sat down on the Orphan Birds."

Very similar has been the action of the Government. The lumbering elephant, dreaming, it may be, of the rare and refreshing fruit in the distance, by its clumsy act has destroyed the value of the doctor's practice and robbed him of his freedom; and when this was pointed out, declared that it would make up all his losses by allotting the sum of 6s. a head, out of which, first, the drugs and surgical appliances were to be paid for, and the balance, if there were any, was to be given for the doctor's services.

Surely, on all counts we are fully justified in our rejection of the scheme designed by the Government and in our determination to build up a better public medical service by our own efforts.

NOTES ON OTHER INTRODUCTORY ADDRESSES AT THE OPENING OF THE MEDICAL SCHOOLS.

The following are brief abstracts of some of the introductory addresses delivered last week at the opening of the winter session of the medical schools:—

Universities and Medical Training.

Speaking at the Victoria University of Manchester, Dr. H. D. Rolleston, Senior Physician, St.

George's Hospital, said that the ideal standard was that every student of medicine at his entrance to the profession should be a graduate in arts, with a sufficient knowledge of physics, chemistry and biology, and of French and German; but these requirements demand more time than can or should be afforded by the average student, and it is for the average student that arrangements and regulations must be adapted. Those who advocated that the preliminary subjects should be taught in the schools usually include biology with chemistry and physics, and this plan was obviously advantageous from the point of view of saving time. But the specialised biology necessary for medicine required the services of a medically-minded teacher in a greater degree than do chemistry and physics, and would therefore appear to be more conveniently carried out in university laboratories than in schools.

In view of the extensive demands on the medical student it had been suggested that the time spent on anatomy and physiology should be curtailed by altering the teaching so as to insist on those details only which are of obvious practical use in medicine and surgery. Thus medical and surgical or applied anatomy, and not the science of anatomy, would be taught, and the minute details of bone markings, the relations of muscles, and other points in descriptive anatomy which have no direct utilitarian bearing would be omitted. Physiology would be pruned to some extent—for example, by the elimination of exercises in muscle-nerve preparations. On the other hand, more attention would be paid to visceral topography and to the minute study of fresh organs.

Apart from their direct practical application, these sciences had a great educational value. Practical anatomy educated the powers of accurate observation and of classification, trained the memory, developed the inductive processes of reasoning, and conferred manual dexterity and quickness of eye. In English universities the professorships of medicine and surgery differed from those of other faculties. Their incumbents, unless possessed of ample means, were mainly dependent for their living on sources outside the university, and therefore engaged in private practice, which must often form the chief interest of their life; whereas the professors of other faculties received a living wage on the tacit understanding that their activities should be entirely devoted to their chairs.

The duties and responsibilities of a clinical professor included (1) the care of the sick in the hospital; (2) clinical instruction in the wards, clinical and, perhaps, systematic lectures; (3) official duties in the university and medical school; (4) the cares and anxieties of a consulting practice rendered necessary to earn a living and to provide for his family and old age; (5) reading and investigation of new methods so as to keep abreast of modern knowledge; and (6) original research in order to advance the science of medicine. The claims of the first four of these spheres of activity left little time for anything else, and especially rendered research almost impossible. It therefore followed that one of the functions of a university—namely, original research for the advancement of scientific medicine—was practically prevented by the conditions under which the professors hold office.

Bacteria and Radium.

At the Middlesex Hospital, Dr. W. S. Lazarus Barlow, in an address upon "The Genius of the Infinitely Little," referred to the minuteness of the agencies at work in some of the most important functions of life. He instanced the production of an infectious disease, its non-production, and the exaltation of virulence in bacteria as examples.

After explaining the extreme minuteness of the rays shot off by radium, Dr. Barlow claimed that it was not difficult to anticipate, what was indeed the fact, that cancer cells and bacteria could be destroyed by them. Even the tubercle bacillus and the anthrax spore, highly resistant though they were to germicides, were killed by the alpha and the beta rays. It could well be imagined that in the not very far distant future radium would be utilised not only to combat cancer (in whose case they had already some knowledge of its efficacy at times), but would also be used in the treatment of bacterial diseases. There was, he added, evidence to believe that smaller doses of radium radiation were stimulative. There were already indications that the idea was not absurd, and, if so, the question presented itself for solution—What was the meaning of the minute quantities of radium found within the human body? But these were speculative regions. Dr. Barlow then drew attention to a few of the fundamental facts about the group of the so-called enzymes, and concluded his study by a reference to the germ cells and a support of the contention that the most marvellous of the marvels they were called upon to consider as biologists was, in spite of Professor Schäfer and the philosophers at Dundee, that all the mysterious complex of physical and intellectual activity which went to make up the individual had been produced by the genius of a cell, not infinitely little, perhaps, when compared with a beta particle of radium, but still less than a hundredth of an inch in diameter. In conclusion, he welcomed the new students to the hospital. He urged them to remember that the reputation for honour and beneficence accorded to the profession by the public was won for them by the genius of the infinitely little ones of medicine in the past; those whose race was more than half run were striving day by day, and after their infinitely little fashion, to hand on to them the torch of honour undimmed.

Common Sense.

At the London (Royal Free Hospital) School of Medicine for Women, Miss Jane Walker, in the course of her address, said that common sense was a faculty to which everyone believed they could lay claim, though, as a matter of fact, it was a very rare possession, and one excessively difficult to define.

Although their own *rôle* in life was the prevention and cure of disease, they made only the most piecemeal attempts to prevent disease. They allowed people to wait till they were really ill, and in many cases past recovery, before they attempted to deal with them. They made the patient diagnose his own condition of illness and come to them, instead of their going to him and hauling out cases in which illness was beginning into the arena to be forewarned or treated if necessary. A really poor middle-aged single woman, to whom the loss of a day's work meant something very considerable, would hold on till she could do so no longer, and then she went to the out-patient department of some hospital, humane enough to admit her without the subscriber's letter, and waited for hours in a stuffy, ill-ventilated hall, with dirty vicious people, afflicted, it might be, with infectious diseases of various kinds, until her turn came to be seen only, in so many heart-breaking instances, to be told "it is too late to do more than patch you up," or "the disease is beyond the power of relief, even by means of operation." The authorities of the King's Fund ought to make a bonfire, on his Majesty's birthday, of hospital letters. Such letters assumed the vanity of the small subscriber and played up to it, they worried and alienated the poor, and they were a survival of the bad Georgian way of patronising the unfortunate.

In regard to the work of medical students, one heard a great deal about all work and no play making Jack a dull boy; but it did not make either Jack or Jill dull at their studies. Possibly it might not verse them in topics which would add to the gaiety of a dinner party, but to do so was not their business. The author of *Confessio Medici* had recorded the speech of a patient to a friend of his: "I don't want my doctor to talk to me about the National Gallery." That was a shrewd saying. Patients wanted their doctor to have had some one else with just their complaint, only worse, but who had nevertheless got well; and cared far more about that than that their doctor should be an artist of no mean standing, or an enthusiastic student of Browning. The majority of their patients would be poor people, and common sense would be of assistance in dealing with them. It would lead them, for instance, to avoid saying to a dirty, frowsy, old woman from Whitechapel, "Do you take a daily sponge bath, Ma'am?" as the speaker had once heard a young house-surgeon say. It would prevent them, too, prescribing champagne and oysters for a private patient whose income was under 30s. per week. The patient might try to get them and succeed, but they would not do her much good, and one result would be a request that the medical attendant's account should be allowed to stand over indefinitely. Dr. Jane Walker concluded by quoting the following lines from Pope:

Something there is more needful than expense,
And something previous e'en to taste—'tis sense
Good sense which only is the gift of Heaven,
And, though no science, fairly worth the seven.

Medical Men and Municipal Affairs.

Having distributed the awards to the successful students at St. Mary's Hospital, the Lord Mayor of London, Sir. Thomas B. Crosby, M.D., said that he hoped when the report of the Commission now inquiring into the affairs of the University of London was issued, some words would be found securing for those who took the joint degree a real degree, instead of their merely being allowed to place a few letters after their name. London degrees were admirable, of course, but colleges which had existed ages before the University of London should have the power of conferring higher degrees upon those who passed their examinations than they possessed at the present time. He had always thought that the medical profession in days gone by had neglected golden opportunities by its members avoiding attaching themselves to such questions as local government. He urged upon the students the importance of taking their share in the work of rural or corporate bodies. They would become leaders, because they knew what was wanted for the health of the people. Such questions were a part of their education, and they would know far better than engineers and that sort of people, the needs and requirements of a community. "I will not allude to a political question," said the Lord Mayor, in conclusion, "but I find it difficult work indeed to keep out all reference to it. When I became Lord Mayor I put my politics under the table, and luckily I have not since then bent down to pick them up. But I have received many earnest applications from brother professional men, who thought, with justice I think—though that must be regarded *sotto voce*—that they were not having fair treatment at the hands of the Government. They, however, have taken the matter in their own hands, and I think they will succeed."

OPERATING THEATRES.

UNIVERSITY COLLEGE HOSPITAL.

Trigeminal Neuralgia—Removal of Gasserian Ganglion in a Woman, Æt. 83.—Mr. Morriston Davies operated on a woman, æt. 83, who had been suffering many years from severe right-sided trigeminal neuralgia, for which she had been treated by different methods with only temporary improvement. The previous operative treatment had consisted of peripheral neuroctomies and alcoholic injections. The extreme danger of removing the Gasserian ganglion in a person of her age was explained to the patient, but she expressed herself as quite willing to run all risks rather than continue to suffer the constant excruciating pain or to submit to further local treatment. Owing to the advanced age of the patient, Mr. Davies decided to do the operation in two stages, so as to diminish as far as possible the shock. The first stage consisted in turning down an osteoplastic flap from the right side of the skull in the usual position for reaching the ganglion by the Hartley-Krause method. However, in this case the size of the bone flap was larger than usual. The dura mater was found to be very adherent to the cranium, and was stripped up from the floor of the skull for a distance of about an inch with considerable difficulty. The flap was then replaced and stitched in position.

The patient recovered from this part of the operation without much shock. Ten days later the second stage of the operation was undertaken. The flap was turned down once more, and the stripping of the dura and the raising of the brain from the floor of the skull were continued until the middle meningeal artery was exposed. Two ligatures were placed round the artery, which was then divided between them. The raising up of the dura and brain was now continued until first the inferior maxillary division and then the superior maxillary division could be seen passing out through their respective foramina in the base of the skull. The dura covering the Gasserian ganglion was divided, and the ganglion then freed from its adhesions to the surrounding tissues on its upper and lower surfaces. No attempt was made to define the inner border of the ganglion or the ophthalmic division, as it was intended to leave these so as to minimise the risks and shorten the length of the operation, and no pain had ever been experienced in the area supplied by the ophthalmic division. The inferior and superior maxillary divisions were divided at their point of exit from the skull, and the ganglion itself was divided between the ophthalmic and the superior maxillary divisions so as to leave, however, the whole of the sensory root attached to the main part of the ganglion. The ganglion was now free except for its attachment to the brain by its sensory root. The ganglion was seized in a pair of forceps and the sensory root plucked out from the brain, and a gauze plug immediately pushed down to the cavum Meckelii so as to prevent blood trickling back on to the base of the brain. The brain was now allowed to return to position, and the osteoplastic flap adjusted and stitched in position, the plug being brought out posteriorly through one of the trephine holes.

Mr. Davies said that there were certain special points about this operation to which he wished to draw attention. The removal of the Gasserian ganglion in a moderately healthy young or middle-aged person, he remarked, does not present any special difficulties, but in old people and in patients with markedly sclerosed arteries the operation is one of considerable danger, and it was for this reason that he had made certain modifications in the ordinary procedures of a Hartley-Krause operation. In the first place the operation was done in two stages instead of one to minimise shock as far as possible. In the second place the opening in the skull was considerably larger than usual, so as to prevent too great compression of the brain when raising it from the floor of the skull, by allowing, to a certain extent, of a bulging outwards of the brain through the opening. Thirdly, it is of the utmost importance that the pressure of the retractors on the brain should be as little as possible and of as short a duration as possible. The best way of ensuring this, he thought, was that the surgeon should hold the retractor in his left hand while freeing the dura and adhesions, and the retractor need only be given to the assistant during those periods when the operator requires both his hands for some particular manipulation, such as the ligature of the middle meningeal artery. Fourthly, the middle meningeal artery was ligatured before it was cut. This, he considers, should be a routine procedure, as the hæmorrhage from the divided artery is often extremely troublesome. Lastly, no attempt was made to remove the ophthalmic division, as it is unnecessary to do this when there has been no clinical evidence of its involvement. This shortens the time occupied by the operation to a slight extent and minimises the risk of injury to the sixth nerve.

The anæsthetic used in this case, Mr. Davies pointed out, was chloroform, and it is important to remember, he said, that once the skull is opened the amount of the anæsthetic given must always be diminished.

The patient made an excellent recovery, and had, of course, lost all pain; she showed no symptoms whatever of cerebral softening or of neuropathic keratitis. When last heard of 18 months after operation she was still quite free from pain.

TRANSACTIONS OF SOCIETIES.

MEDICO-CHIRURGICAL SOCIETY OF GLASGOW.

MEETING HELD OCTOBER 4TH, 1912.

The President, DR. FREELAND FERGUS, in the Chair.

DR. ROBERT KENNEDY demonstrated an interesting series of

CASES AFTER OPERATION FOR VARIOUS FORMS OF PARALYSIS.

(a) Case of a man, æt. 30, which illustrated a peripheral nerve lesion, and therefore was associated with atrophy and degeneration of the muscles, and which, after operation, is a considerable time before recovery takes place on account of the atrophy. The man tripped and fell on December 9th, 1911, and sustained a dislocation of the left shoulder. The dislocation was reduced two days afterwards and the arm put in a sling. It was kept up for about a month, and, at the end of that time when the patient tried to use it, he found he could not do so as the arm was paralysed. He was sent to Dr. Kennedy on March 4th, 1912, three months after the dislocation and admitted to the Glasgow Royal Infirmary. At that time the following condition was found on examination: he could raise the left arm at the shoulder barely to a right angle, but in doing this the scapula was pulled forwards, which action is due not to the deltoid but to the trapezius and the lower part of the serratus magnus pulling on the scapula. He could partly flex the arm, but it was very weak, showing a certain amount of power in the biceps. Supination was very weak and defective, being scarcely present at all; no power of extension, and complete wrist drop. He was able to extend the fingers only at the second distal joints, not at the proximal joints, which is caused by the muscles of the hand. There was no power in the extensors of the forearm and there was loss of complete flexion. With regard to sensation, touch sense was present everywhere but dull, and the sense of pain was present.

The lesion was evidently not a complete rupture of the brachial plexus, but only partial.

On March 4th, four months after the injury, the brachial plexus was exposed, when the trunks of the plexus were found to be compressed by cicatrices. The plexus was dissected out of the adhesions, which proved a very difficult procedure. The scar of the incision was in the axilla. The wound healed by first intention.

Three months after the operation, that is in July, the patient began to recover movements of the arm, and four months afterwards—*i.e.*, August 6th, sensation was found to be normal.

The present condition of the patient is that he is able to abduct his arm against considerable resistance to an angle of about 135 degs., to flex the elbow with very considerably increased power, and supination is almost normal. Extension of the wrist is completely restored. The electrical reactions before and after operation are interesting. The faradic current to the deltoid before operation had no response at all, but now gives a minimum response at the separation of the primary and secondary coil at 60 mm., compared with 80 mm. at the sound arm. The biceps before operation gave a response in the injured arm at 52 mm., compared with 90 mm. in the sound arm, but after operation now gives response at 80 mm. The extensors of the forearm over their nerve supply and muscles gave no response before operation, now respond at 60 mm., compared with 65 mm. in the sound arm. The galvanic current shows much the same kind of affairs.

The measurements of the arm taken eight inches from the acromion process show in circumference the left arm to have been 9½ inches, before operation the sound arm, 11¼ inches, showing a deficiency of 1¾ inches in muscular substance. On Otober 2nd, 1912, the injured arm measured 10¾ inches, thus showing 1¼ inches of muscular substance to have been regained, and only ½ inch to make up the same size as the healthy arm. The same thing was noticeable in the forearm; the measurement taken 1¼ inches below the flexor, where before operation the measurement was 9¾ inches, compared with 11 inches on the sound, now measured 10⅜ inches, showing an increase of ⅝ inch in six months.

(b) A case of birth paralysis or Duchenne's paralysis.—Where the lesion is found in the brachial plexus at the junction of the fifth and sixth nerves and sometimes also the seventh. It is either torn or compressed by cicatrices. The child was operated on in August, 1908, being at the time two months old, which is the best time to operate, provided there are no faradic disturbances in the muscles. The lesion was produced at birth and the arm was completely paralysed. The child could not abduct the arm because of the deltoid, could not flex the arm because of the biceps, being useless, could not supinate and could not rotate the arm outwards. At the operation the lesion was found to be a cicatrisation band encircling the junction of the fifth and sixth trunks, and on cutting the band it sprang apart leaving a furrow in the nerve trunk. Healing was by first intention. On December 14th, 1908, abduction of the arm to 120 degs. and flexion to 90 degs. Supination was still absent, but this is always late in returning. The child was now shown four years after operation with a very satisfactory and useful arm. There is still a very slight weakness of the supinators, and this may be explained by the difficulty that is experienced of getting the mothers to give passive movements in hospital patients.

(c) A case of complete paralysis of the arm resulting from a cortical lesion, in a man, æt. 32. On November 19th, 1911, a heavy door fell and struck the left side of the head, inflicting a wound to the scalp and fracture of the vault. He lost consciousness for three days, and when he came to himself it was found that he had paralysis of the right side and had lost the power of speech. Five days after the accident he was taken to hospital, and speech returned in ten days, and a week later movements of the right foot. Three weeks after this epileptiform seizures occurred, accompanied by buzzing in the head, tremors in arm and twitching of the face. No other improvement occurred after the accident.

The left side of the scalp showed a large and deep cicatrix, the upper end commencing six inches from the glabella and extending downwards three inches above the ear. Above this defect of the skull a piece of bone projected. Pressure produced tremors of the right hand, and on one occasion pressure brought on a typical epileptic attack, the right arm, leg and face being involved. Complete loss of consciousness, dilated pupils, and head thrown back. He remained unconscious a quarter of an hour.

The lesion was situated over the pre-central gyrus and the upper part of it, involving the shoulder, elbow, fingers, wrist and thumb. He was operated on in June, 1912, seven months after the accident. The operation consisted of removing the scar from the cicatrix and some spicules of bone from the cortex. The cortex was damaged by the scar, and on attempting to stimulate the brain by electrical methods no response was obtained, because it loses its excitability very rapidly.

The day after the operation—viz., June 21, 1912—he lost the tremors of the arm and made voluntary movements, and the fingers could be brought into contact with each other. Abduction and adduction, supination and pronation could be accomplished. He could also raise his arm at the shoulder and grasp the rail at the head of his bed within twenty-four hours of operation. Some tremors are still present, but he is able to perform all voluntary movements.

(d) Lesion in the spinal cord affects the anterior horn, causing obstruction to the nutrition of the muscles, and is a case of infantile paralysis. The operation here consists in what is known as tendon grafting, and consists in taking muscles in the neighbourhood and making them do the work of the paralysed muscles. For instance, if the extensors are the muscles affected, then you split the flexor, and make one-half of the flexor do the ordinary work of the extensor. A child, æt. 7, had talipes equinus of the right foot and infantile paralysis six years ago. She walked on her toes, had no power of extension, and the foot was everted. The gastrocnemii were bulky. The electric examination gave normal response to the gastrocnemii, but it was absent in the anterior group of muscles.

On May 24th, 1912, an incision five inches long was made on the outer side of the gastronemii and the muscle split into two parts, one-third of the muscle being used as a flexor, the remaining two-thirds for extension. The muscle was lengthened, not cut. An incision over the paralysed tendon and a tunnel made at the lower end of the wound, a probe threaded, enabled the part of the muscle to act as flexor. The child now walks on the sole of her foot. That the gastrocnemii have voluntary power of producing flexion of the ankle can be proved by electric stimulation, and in addition the thickening of the split muscle is visible in the child's leg during contracture.

Drs. Renton, Hunter, Findlay, Young and Edington took part in the discussion which followed.

Dr. W. K. Hunter described and showed

X-RAY PHOTOGRAPHS FROM A CASE OF SCLERODERMIA, WITH CALCAREOUS DEPOSITS IN THE SUBCUTANEOUS TISSUES OF THE FINGERS.

The case was that of a woman, æt. 39, admitted over a year ago, who had been under observation and treatment for three months. Her illness began when 14 years of age with the phenomena of Raynaud's disease. At 18 years of age she had pains in her joints, involving all the joints of the upper and lower limbs except the shoulder and hip, and this continued more or less to the age of 25 years. About the time of the pain in her joints she began to feel the skin of her hands begin to get very tight. Her hands did not grow in proportion to growth elsewhere, and changes in her face became noticeable. Photographs of the patient aged 15, 18, and 23 years show that there was no affection of the face at 15 years of age, but it shows itself afterwards.

At 21 years of age, when the disease had gone on for seven years, she began to have little nodules round about the finger joints, and after a time the skin over them gave way and exposed little chocolate-coloured substances, which came away. Sometimes suppuration occurred before these substances became detached, and sometimes afterwards. Skiagrams show infiltration of the soft parts. The feet became affected with deposits, but never much sclerodermia.

The face has got a thin, pinched appearance and the mouth is small, and there is difficulty in opening the mouth fully. She has thin, pointed fingers. The limits of scleroderma are not well marked, and the affected skin passes into the unaffected skin. The abdomen and front of chest are not affected. There is a good deal of limitation of movement, and she is unable to get her arms quite straight, and has difficulty in going upstairs due to the tightness of skin in the gluteal region, and also difficulty in getting up after sitting or lying down. The treatment has been by injection of fibrolysis for 8-9 weeks, and she says it does her good and she is more supple. The calcareous deposits in the subcutaneous tissues are exceedingly rare, and Dr. Hunter had been able to find only two other recorded cases, both reported within the last twelve months.

The relationship of Raynaud's disease to sclerodermia is very fine and very close. Regarding the pathogenesis, not much is definitely known, the most obvious explanation being that there is a sclerosis of tissue which encourages the deposit of calcium salts.

Dr. Hunter also showed blood films from a case of infantile splenic anæmia (aplastic anæmia?).

Dr. G. H. Edington read an account of two

UNUSUAL FORMS OF SPINA BIFIDA.

(*a*) Female patient, aged four months, and sent to hospital on account of swelling at the back of the neck. At birth the child was quite fat, and a swelling at the back of the neck was thought to be a relay of fat, but the swelling increased out of proportion to the general growth, and the child was sent to hospital. The appearance of the parts showed that the whole breadth and length of the neck was occupied by the swelling. The skin over the swelling was of normal thickness, but slightly œdematous, with no excess of hair, no translucency, and when the child cried there was no difference in the size of the swelling, nor was there any disturbance of the nervous system on compression. On palpation of deeper parts there was a structure resembling a piece of cartilage or bone, which was not connected with the spinal column and quite easily moved about. A skiagram showed two shadows, one far out and the other attached to the vertebræ. The arch of the second vertebra was absent. The tumour was presumed to be a meningocele, with no connection with the spinal column, or very small connection, and operation was carried out. On cutting into the mass nothing was found beyond fat, and only when deep down was found a spina bifida without meningeal protrusion, the great bulk of the mass being fat. Recovery was uneventful.

With regard to the presence of a mass of fat as differing from ordinary lipoma, there was no circumscription of the swelling and no lobulations, but on the other hand, unlike the lipoma accompanied by spina bifida, there was no excessive growth of hair, which is quite frequently seen and written about. The bony structures were partly cartilaginous and partly bone, and were undeveloped laminæ.

(*b*) Female, aged 4 months, had a large cystic mass projecting from the back of the right hip, not in ordinary position of spina bifida, but springing from the outer surface of right innominate bone; the lower limit was in a fixed position of extension and markedly everted. The swelling was congenital and had increased considerably in size. The swelling was punctured and eighteen-and-a-half ounces of fluid evacuated. The patient was brought back again in three days with the swelling as large as ever and more radical measures were decided upon, and it was cut down upon. It was found to be covered by muscles. After clearing the sac it was again punctured and a like amount of fluid removed. The sac was then slit open and on the ventral surface nearest the back a substance like cord and a small hole with many cords.

The child collapsed and died within twenty-four hours. At the *post-mortem* examination the chief interest was the condition of the spinal column. The laminæ of the left side were well developed, but tended to point straight backwards, but the posterior ends were nearest the centre. The laminæ of the fourth and fifth lumbar vertebræ were rudimentary and a large opening was looking out from the spinal column towards the right hip. The volation of the sacrum on the long axis and towards the right caused a certain degree of scio. The sacrum was dislocated upwards and lay behind the fifth lumbar vertebra.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Oct. 5th, 1912.

TREATMENT OF FEVER.

THE treatment of fever due to infection or microbian intoxication, the only one referred to here, should be essentially pathogenic and symptomatic when it is not specific.

The treatment of infectious disease, says Dr. Luc Vital, rests on four fundamental principles :—

(*a*) Annul the action of the pathogenic microbes.
(*b*) Annul the action of their toxins.
(*c*) Lower the high temperature.
(*d*) Enable the organism to resist the infection.

To act directly on the microbes, internal antisepsy was tried, but beyond quinine in paludism, mercury in syphilis, salicylic acid in rheumatism, that method gave little results.

To annul the action of the toxins, the only aid to their elimination may be found in purgatives, diaphoretics, diuretics, hence, exception being made of the above specific injections, the therapeutics of fever are purely pathogenic and symptomatic.

The principal symptoms of fever are Thirst, oliguria, hyperthermia, acceleration of the pulse, adynamia.

For the thirst the patient should be given abundant drinks, not only to relieve the inordinate thirst, but as the best means to provoke diuresis and diaphoresis, necessary to the elimination of the toxins.

A patient suffering from infectious disease should consequently drink largely. Lemon water (two lemons cut up for a quart of boiling water), apple tea, etc., are agreeable drinks. Citric lemonade is particularly indicated in acute rheumatism :—

Citric acid syrup, 3 oz.
Water, 1 quart.

In affections of the intestine lactic acid might be prescribed :—

Lactic acid, 2 dr.
Syrup, 3 oz.
Water, 1 quart.

For oliguria lactose might be given to increase the diuresis; two ounces in a bottle of Evian water.

To aid in the elimination of the toxins, purgatives should be given, castor oil, or sulphate of soda :—

Sulphate of soda, 1 oz.
Lemon syrup, 1 oz.
Water, 9 oz.

Calomel is useful both as a purgative and a diuretic, two grains every hour for four hours.

Enemas of cold water also favour diuresis (8 oz.).

Hyperthermia.—There is no special treatment for hyperthermia as long as the temperature does not exceed 102° F.

One of the most active means of acting against it is cold water; cold baths (77 deg., ten to fifteen minutes), lower the temperature by one degree. Their further effects are : increase of the diuresis, elimination of the toxins, and stimulation of the organism. Cold compresses on the abdomen should be prescribed in the interval of the baths, while a stimulating mixture should be given before and after the bath :—

Tincture of cinnamon, 1 dr.
Syrup, 1 oz.
Brandy, 1 oz.
Water, 3 oz.

Where cold bathing is refused or not possible, cold effusions may be practised every two hours; spirit of lavender may be added to the water.

Antithermic drugs are of little use; however, phenacetine might be given :—

Phenacetine, 6 gr.
Citrate of caffeine, 2 gr.
for one wafer; one to two a day.

Tachycardia.—The pulse should always be the object of careful attention as it furnishes important indications on the state of the heart and the degree of resistance of the patient. Where the pulse is small, depressible, and exceeds 120, a cardiac tonic is required : small and repeated doses of sulphate of sparteine ($\frac{1}{2}$ gr. three times a day) fulfil the indications.

Adynamia.—The strength of the patient should be kept up as much as possible, but only by liquid food : milk, vegetable soups, decoction of cereals, lemonade mixed with a little wine, weak coffee. Hypodermic injections of camphorated oil repeated frequently or injections of strychnine form the medical treatment.

GERMANY.

Berlin, Oct. 5th, 1912.

THE Sixth International Kongress f. Geburtshilfe und Gynækologie continued the discussion on the

TREATMENT OF WOUNDS OF THE PERITONEUM.

Hr. P. Lecène, Paris, said that the great advances that had been made during the past ten years were to be traced to certain factors : methodical employment of indiarubber gloves, strict asepsis, accurate peritonisation of bleeding surfaces either with or without the shutting off of the small pelvis, more accurate determination of the indications and a better system of drainage.

Hr. Resinelli, Florence, said the best result, both in septic and non-septic cases was obtained by the complete removal of blood and other fluids from the abdomen, complete union of all solutions of continuity in the peritoneum, careful avoidance of all injury, or immediate repair if any had taken place to intestine, bladder or ureters. Drainage in the free abdomen was only exceptionally to be made use of. Flushing out of the abdominal cavity with physiological solution was of doubtful value. Preventive injection of oil of camphor into the abdominal cavity was not an advance in treatment. The results of his own experience in cancer of the cervix uteri justified the speaker in recommending hypodermolysis with a solution of neucleic acid as an active agent. It was indisputable that the great necessity for the most accurate asepsis remained for laparotomy, but the result depended mainly on precision and advances in technique.

Hr. B. J. Kouwer, Utrecht, said that the result in clean cases of laparotomy depended equally on technique and asepsis. Cell tissue was more readily infected than the peritoneum. Mechanical irritation of the abdominal wound was to be avoided; this was of great importance. In regard to this the use of the usual abdominal speculum, especially where the incision was but small, was of importance.

Hr. Josef Lovrich, Budapest, said they provided for a complete evacuation from the bowels; they had never seen any harm from it. Remarkably often one found hidden cysts filled with many micro-organisms. A pyelitis, even, of medium degree might be present without any very marked symptoms. Weaker patients, the day before operation, got, in addition to good feeding, moderate doses of digalon, and rest was insured the night before the operation by veronal. They only operated at the time of menstrual congestion when it was unavoidable. On the day of the operation the patient, early in the morning, got 0.5 gm. of veronal. The bladder was washed out and the vagina disinfected immediately before the commencement of the operation. As preparation of the field of operation they made use of soap, warm water, acetic alcohol, and 5 per cent. tincture of iodine. The operator who had begun the operation must close the abdomen.

The abdominal opening was always made sufficiently large to allow of easy manipulation. They never used a very high Trendelenberg position. The blood-vessels were ligatured separately as much as possible. Every wound of the abdominal cavity was covered with peritoneum. If at any operation they were not quite certain of absolute asepsis, Douglas' pouch was drained with iodoform gauze; the drainage could be carried either upwards or downwards, whichever way seemed the more practicable.

In the Wertheim operations the parametrium of both sides was drained with small strips of iodoform gauze, and besides this the abdominal cavity was also drained with similar strips, which were carried down below through small openings in the vaginal arch.

They laid great stress on setting up peristaltic action in the bowel within the first twenty-four hours. "Peristaltic Hormon" was an excellent remedy, but wine-glycerine enemata had served them the best.

Patients recently operated on could move themselves in the bed freely; foot and arm movements, lung-gymnastics, oxygen, digalon according to requirements completed the treatment. As regarded early getting up, laparotomy patients rarely wished to get up for the first few days, and there was no reason why they should do so. Patients got up generally from the 8th to the 10th day; after the sutures had been removed. They got up of themselves.

At the Budapest Womens' Klinik from March 1, 1903 to January 1, 1912, 960 celiotomies had been performed of which 101 were through the vagina with a mortality of 5.9 per cent. Through the abdominal walls 859, with a mortality of 8.6 per cent.

Herr A. V. Mars, Lemberg, said that after improved technique and complete asepsis a considerable improvement had taken place in operations of all kinds. The cause of death was but rarely general septic infection; it was almost always peritonitis. An improvement on these results should be striven for by raising the resisting power of the peritoneum and diminishing the sensitiveness to infection. The method of procuring asepsis also should be simplified.

Herr Wertheim, Vienna, said the utmost possible avoidance of damage to the peritoneum (mechanical, chemical or thermic). Working in the cleanest and dryest manner, and especially removal of all necrosed tissues covering all injured parts of peritoneum. Proper treatment of the sub-peritoneal spaces, avoidance of any retentions by keeping an opening if possible through the vagina. Shutting off of the intra-peritoneal regions in case they were infected, or there was suspicion that they might become so. Where parts could not be covered with peritoneum they should be shut off by means of gauze, or they might be kept open.

AUSTRIA.

Vienna, Oct. 5th, 1912.

Renten-Neurosis.

Rudinger complains of the absence of laws to guide the nerve specialist in writing a certificate for the Compensation Act. Neurosis after an injury is not a self-created prodroma, but a sequence of the injury and ought to be considered in the compensation. The loss of time for the repair of the injury is provided for, but where the repair of nerve system is prolonged indefinitely the specialist is at a disadvantage to determine the period of recovery. Again, there are cases where the objective symptoms frequently improve while the subjective remain stubborn and refractory.

The former when conducted in a suitable institution can be measured and estimated with some feeling of accuracy but the latter is left to guesswork. Some patients are less sensitive and may after a time of rest recover rapidly where another class may have the impression more deeply fixed on the nerve centres, so that it becomes impossible to determine the period the patient may be unable to work and the loss sustained in wages during that time.

Oxyproteins and Amino-Salts in Urine.

Erben's method of estimating the oxyprotein alloxyprotein and antoxyprotein with mercurial acetate in an acetic solution is not quite free from objection as the fractional parts are not measured, and disagree with Falls', Salomon and Saxl's results which are also too high. Ginsburg's method with the oxyprotein and amino salts as well as the glycocol are no higher. Again, the value of the nitrogen in the oxyprotein salt in an alkaline solution does not exactly measure the protein salt as the precipitate varies. Erben finds that the mercurial precipitate of oxyprotein acid, antoxyprotein, and alloxyprotein is distinctly increased in phosphorus and lysol poisoning as well as in diseases of the liver and diabetes mellitus. In these diseases the value of the oxyprotein nitrogen averages 0.3 and 0.5 of a gramme eliminated daily, which is from 2-3 higher than the whole amount of nitrogen present. This is a value given by Falks, Salomon and Saxl as a diagnostic symptom for carcinoma. The oxyprotein salt is largely increased in infectious diseases, pernicious anæmia and leucæmia. In the first it is found in the crisis and passes off in the lysis. In typhus it is 0.36 grammes or 2 per cent., in pneumonia it is 0.31 gramme or 2 per cent., and in leucæmia or after treatment with Roentgen rays it is as high as 0.36 gramme, or 2.2. per cent., but in chlorosis and nephritis it is normal, in the latter it is decidedly less. These results show that an auto-phagistic process is active even when no disease is present in the liver, which increases the elimination of the oxyproteinic salt. The increase of this product in stenosis of the bowel and pylorus when of a benign nature is the result of inanition as it is a consumption of the proper material of the body. While carcinoma is of a genuine auto-phagistic process as well as diabetes mellitus and fever.

The elimination of the amino salts does not run parallel with the oxyprotein as they are slightly higher in hepatic disease and phosphorus poisoning, as in the latter *sub finem vitæ* it rises to the enormous height of 1.2 gramme while the glycol registers 6.5 grammes eliminated in one day, or 6.7 per cent. of a total nitrogen. In diabetes mellitus the amino salt is proportional to the elimination of the total nitrogen ranging to about 0.3 gramme of nitrogen equal to 1.6 gramme of glycocol. In pernicious anæmia the elimination of the amino salt is increased, probably due to implication of the liver, while the same may be inferred of infectious diseases of the crisis and lysis. There is a striking reduction in the elimination of this salt in measles, typhus and pneumonia and also in diabetes and nephritis approaching death.

HUNGARY.

Budapest, Oct. 5th, 1912.

At the last meeting of the Budapest Medical Society Dr. Kiss read a paper on

Disorders of the Heart in Juveniles.

He has found comparative hypertrophy of the artery walls not an uncommon discovery in older children and at puberty, but the blood-pressure with it is not materially increased, although there may be palpitations and a sense of oppression in the chest. The cause is a "growth hypertrophy," as a rule, although excessive masturbation may induce a similar syndrome. The lack of dilatation of the heart, of murmurs, the normal size of the liver, the good health otherwise and absence of aggravation of the symptoms by physical exercise render an organic lesion improbable. Children are particularly prone to arrhythmia on the slightest excuse, and the harmless arrhythmia is distinguished by the full and powerful pulse-beat; the diastole alone varies in length. This form of arrhythmia also subsides if the heart action becomes accelerated, as then the abnormally long diastoles are shortened. This infantile type of harmless arrhythmia may persist beyond puberty, and give grounds for alarm if casually discovered first in a young, pregnant woman. Arrhythmia due to actual organic disease is generally the result of extra-systoles. Extra-systoles may be accepted as suspicious of a genuine organic heart lesion; at the same time, they may occur solely from some nervous affection, and may even be the first manifestation of an organic nervous disease. No one to date has succeeded, he says, in inducing extra-systoles by irritation of the heart nerves. The arrhythmia in tuberculous meningitis is of the infantile type, that is it seems to be due exclusively to diastoles of varying length. Heart murmurs may also be observed without organic lesions, he adds; Lüthje found systolic murmurs in 623 out of 857 children examined, but only 2 per cent. of the total number had certain signs of valvular disease. Beyer detected a systolic murmur in 352 of 830 school-children examined, most frequently in girls. In 253 cases the murmur was audible during repose; in the others, only after gymnastic exercises. The murmurs did not parallel findings of anæmia, and in only 14 cases were concomitant signs of a heart defect to be detected. Kiss explains these accidental murmurs as due merely to certain physiologic and anatomic peculiarities of the circulation in children, differing possibly in the various cases, such as a more rapid flow of blood in the anæmic, or a slight, transient, muscular, mitral insufficiency.

Diet in Diabetes Mellitus.

Dr. Menyhért declares that the diet should be individualised for the patient, and the special phase of the disease more than is generally done. It has been his experience that the way in which the carbohydrates are prepared for the table is of the greatest importance for their tolerance by the diabetic. They are tolerated best in the form which takes the longest time for their absorption, and which passes most slowly into the blood, such as coarse, tough, moist bread, rather than fine, dry and toasted bread; baked potatoes, instead of soft, smashed potatoes, etc.

The behaviour of the albumin metabolism is the criterion of the severity of the case and of the permanence of recovery. It is possible, he says, to conceive of a functional diabetes in which the centres regulating carbohydrate metabolism do not functionate normally because the internal secretions of the organs involved do not reach them physiologically, owing to lack of development of the organs, or to toxic influences, or other causes. As the young organism grows into harmonious physiologic proportions, things right themselves. This assumption would explain Hürter's case of apparently complete recovery from severe diabetes in a girl of ten. Lermé (of Nantes) also reported a case of apparently complete cure of a young man of 20, who two years ago presented severe acetonuria and other symptoms of grave diabetes, so that the prognosis was regarded as distinctly unfavourable. What no medical measures had been able to accomplish was realised naturally, probably, by the further development of the organs or centres or both involved.

CANADA.

Toronto, Sept. 28th, 1912.

Meeting of the Canadian Public Health Association in Toronto.

America is certainly the country in which conventions are most in vogue and Canada is following in the footsteps of her big sister. There are held conventions of every description, and the medical men are by no means behind hand in contracting the convention habit. Whether or not the holding so many meetings is in the interests of health and the medical profession is a moot point. There are some who think that if less of such meetings took place their loss would not be felt. It is pointed out that many of the papers read are of small account and that really a considerable amount of time is wasted in travelling to and fro. Of course, however, there is another side to the question, meetings give medical men the opportunity of exchanging views, enlarging the scope of their knowledge and mind, and of keeping in touch with all that is latest in medicine and surgery. This is the season for medical conventions. The meeting of the Canadian Medical Association took place recently, the meeting of the Canadian Public Health Association is just over, the American Public Health Association is now holding its meeting, and next week the International Congress of Hygiene meets in Washington, while, at Detroit, the American Hospital Association has its annual session.

Whatever may be said of the plethora of medical meetings on this Continent, there is no doubt that the *raison d'être* for the Canadian Public Health Association is strong. Canada has many health problems to be solved, the chief of which are the safeguarding of its water supplies, and the best methods of dealing with its large immigration. Both are acutely pending questions. Typhoid fever is continually breaking out in one or another part of the vast dominion, mainly due to polluted water, and the immigrants are unfortunately flocking to the cities rather than to the rural districts where they are most wanted. The influx of Southern Europeans and Italians to the towns has brought about a condition in some of the larger cities and towns almost comparable to that existing in the cities of Europe.

The meeting of the Canadian Public Health Association in Toronto was a success from all points of view. Although only the second meeting since the establishment of the association, it was shown that the association during its short term of life has flourished exceedingly. Already it has more members and larger funds than the American Public Health Association, which has been in existence for forty years. This rapid advance is due to the enlightened policy of those responsible for its management. The general public is urged to take a part in the fight against preventable diseases, and laymen and laywomen are welcomed as members of the association. That they do take great interest in matters relating to public health and have joined the association in large numbers was plainly evident from the attendance. At all the meetings numerous men and women from all ranks of life were present and took part in the discussions. The first paper read was also in many respects the most important. It was by Dr. P. H. Bryce, Superintendent of Immigration, Ottawa, and dealt with the question of how

Shall Canada Save Her People from the Physical and Mental Degeneration Due to Industrialism

as seen in the great cities of older civilisation? He showed that the increased cost of living in Canada was 27 per cent., in the United States 29 per cent., in Germany 40 per cent., and in Great Britain 5 per cent. for the year. He attributed the increased cost to the insane rush to the cities of Canada, both by immigrants and by agricultural labourers. Dr. Bryce asked how long can a country, essentially a producer of raw material by virtue of geographical location and extent of territory still largely undeveloped, continue normally to develop and prosper when it has shown a displacement of rural population during the past ten years never witnessed before in the history of any people, and an increase in urban population, rapid even beyond the palmiest days of United States immigration. Dr. Bryce suggested various means by which people might be drawn back to the land, most of which were of an economic nature.

Another paper read in the same session by Dr. Bruce Smith, Inspector of Prisons and Public Charities for Ontario, consisted for the most part of an

Indictment of Municipal Hospitals.

That is as they are conducted on this side of the Atlantic. He contended that ward politics were decidedly incompatible with general hospital management, and that the contrast between municipal hospitals and those directed by a local board was most marked. There was always a discordant note from the executive side of the municipal institution. Everywhere were seen the fingers of the politician; the ward boss and the political heeler exerted their baneful influence without check or scruple. Fortunately they had not in Canada the experience which had been so expensive in some American cities during the past few years. Dr. Smith held that the private patient should be permitted to have his own physician or surgeon attend him if he wished; the semi-private patient should have the same privilege if he contributed to the hospital a sum equal to the cost of his maintenance there; the patients in the public wards should be attended by members of the staff. To permit patients in the public wards to have their own medical men would cause endless confusion. Dr. Smith argued that the province of a hospital was not only the treatment and care of the sick, but the instruction of students in the art and practice of medicine and surgery, and the prosecution of scientific research for the welfare of the race.

(To be continued.)

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Resignations of Society Appointments.—During the past week the resignations of medical officers to clubs have been handed in in a number of districts throughout Scotland. In most cases the resignations have been unanimous. In Edinburgh 116 clubs are involved, and it is believed that every appointment of the kind has now been resigned; in Leith the tale is the same. In Inverness and Fife a similar unanimity prevails. In all the areas in which general resignations to take effect on January 15, 1913, are being handed in, the practitioners concerned are pledged not to accept any appointment so resigned.

Sanatorium Benefit.—There is a very strong feeling among practitioners generally against the appointments of medical officers of health acting as chief tuberculosis officers. It is felt that Public Health officials do not possess the clinical experience requisite for the efficient performance of the duties of tuberculosis officials, and that their attempt to do the work is contrary to the spirit of the Astor Report. The profession also feel that one of the main underlying ideas of the Astor Report—that the duties of a tuberculosis officer in relation to the general practitioner are essentially consultative—is likely to be frustrated should the work fall into the hands of medical officers of health, who would tend to deal with tuberculosis as they deal with the infectious fevers and take it entirely out of the hands of the practitioners. Indeed, this is no idle fancy, because it is known that the avowed intention of one Scottish County Medical Officer of Health is to treat every case of tuberculosis in a sanatorium, and to discourage domiciliary treatment altogether. The Scottish Local Government Board is known to favour the entrusting of the duties of chief tuberculosis officer to the M.O.H., and in certain official quarters the idea of domiciliary treatment is deprecated on the ground that a working man's home cannot be rendered suitable for treating a case of tuberculosis. Other M.O.H.'s hold opposite views, and we have it asserted equally definitely that sanatoria are needed little, if at all, but that what is required is a Tuberculosis Dispensary. The fact is that Medical Officers of Health have not the clinical experience necessary to prevent them falling into the error of generalising. Tuberculin is all very well in its way, but its wholesale use at a dispensary will not cure tuberculosis. Sanatoria are most valuable, but not every case needs them. The general problem of tuberculosis is one thing; the treatment of the tuberculosis patient another. We take it that the duties of the M.O.H. begin and end with administration—with questions of housing, of infection, of disinfection, and the like; the treatment of tuberculosis should remain in the hands of the clinician—that is to say, the general practitioner supported by an expert in the diagnosis and treatment of the disease. By this means, not by any wholesale institutional or tuberculin treatment will sufferers get the best chance of cure.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE POSITION OF DENTISTRY.

To the Editor of The Medical Press and Circular.

Sir,—I ought to have thanked you in my last letter for the admirable leader on the above-named subject in your previous issue. You have there supplied an absolutely clear statement of the case upon which was based the claim for the legislation which, through the Dentists Act of 1878, gave to dentistry a position as a medical speciality under the government and control of the General Medical Council. Since the greater includes the less, it was inevitable that with the overthrow of that part of medical law which was designed to protect the public, the corresponding, and similarly worded, clauses in the Dentists Act would be sooner or later discovered to be inoperative; and, as you have pointed out, there now remains no legal check upon the false pretences of unqualified pretenders or fraudulent quacks in any department of practice they may choose to take up. The Dentists Act in this direction was bound to go. The pity is that the British Dental Association did not bring the question to a final issue in the law courts twenty-five years ago, or as soon after 1878 as violations of the spirit of the Act began to be common. If the weakness of the then new legislation had been at once exposed, and confirmed by the High Court and the House of Lords, an amending Act to repair the weakness of the statute might have been demanded with reason. The Dental Association showed lamentable weakness all along. It was always evidently willing to wound and yet afraid to strike. Unqualified practice increased, with increasing boldness in use of language in advertisements implying possession of a legal qualification; and finally, about twenty years ago, the late Mr. Labouchere, in *Truth*, gave the *coup-de-grace* to the dwindling respect in which the law was regarded by unregistered men. I am reminded of this episode by your leader on *Truth* in your current number. It might be amusing, if not instructive, to learn what the present Editor has to say about it. The Dentists Act was accepted by Parliament because it had been incontrovertibly demonstrated that the uneducated dentist was only one degree less harmful to the public than were his brethren practising in other departments as specialists of medicine, and that he was less harmful only because his powers were more limited; he did not often deal with issues of life and death. These facts and considerations were to its own satisfaction proved by *Truth* to be mere "flapdoodle bunkum and hypocrisy." The ideal dental practitioner was the inventor of the "guinea jaw, warranted for five years," and after a series of articles on the subject, the late Mr. Labouchere ended by giving his personal testimonial to the proprietors of this invention. This testimonial was advertised for years, and no doubt made the fortune of its possessors. This formed a sort of apotheosis for the unqualified dentist, and it was not to be wondered at if a crowd of men of the type you have described took the hint so forcibly pressed on their notice.

As I pointed out in an earlier letter, there are now more unqualified men than qualified men practising dentistry. The unqualified vary between honest, albeit mostly ignorant, mechanics and unscrupulous men out only for plunder. Some of these men work under the cloak of companies or bogus institutions with fine-sounding names. These establishments are worked by unqualified assistants. It is well known that these men receive small salaries, but large commissions on the receipts. The aim is, therefore, to get as much money out of each patient as possible, and consideration of the welfare of the patient takes a second place. The cruel character of a great deal of quack dental practice is well known to every ligitimate practitioner of sufficient experience, and is exemplified daily among hospital patients. The victims are mostly women—wealthy, foolish ones among the higher ranks, simple, confiding and helpless victims among the lower.

I am, Sir, yours truly,
A Hospital Dentist.

October 2nd, 1912.

SOMETHING BEYOND INSURANCE REMUNERATION.

To the Editor of The Medical Press and Circular.

Sir,—Sir Victor Horsley, in his speech at Appleby on September 26th, refers to the difficulty between the Chancellor of the Exchequer and the medical profession as being "merely a question of remuneration for work done."

Undoubtedly the question of remuneration is a very important one, but it is by no means so all-engrossing to the medical profession as has been represented. There are many other points in the medical clauses of the Insurance Act to which objection is taken, the chief opposition of the profession to the Act being on account of its inefficiency as a measure for improving the public health.

One of the principal demands of the profession is for adequate representation on the local Insurance Committees. A perusal of the lists which have been published giving the *personnel* of these Committees amply demonstrates the necessity for this demand. It will be of interest to medical men, and possibly also to the general public, to study the composition of these Committees to which it is proposed to give so much power. Copies of the lists may be obtained from Messrs. Wyman, Fetter Lane, E.C., at the price of 1d. each.

It is imperative that the public should realise that adequate remuneration is not the only principle for which the profession is fighting. It should also be understood clearly that in this fight the interests of the doctors and of the public are identical, a good and efficient medical service being a necessity to the nation; but this efficiency cannot be attained under ignoble conditions.

I am, Sir, yours truly,
J. WEBSTER WATTS,
Secretary, National Medical Union.
5 John Galton Street, Manchester.
October 2, 1912.

A QUESTION OF AUTHORSHIP.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Having just had for the first time the opportunity of reading Dr. Claye Shaw's lecture in your issue of August 21st, I find him crediting Charles Lamb with the following lines:—

"Is it a party in a parlour,
Crammed just as they on earth are crammed?
Some sipping punch, some drinking tea,
And by their faces, as you see,
All silent and all damned."

But to the best of my recollection, the author of them was none other than the poet Wordsworth, who, however, saw fit to omit them from any except the first edition of the poem of which they form a part. I doubt whether the admirers of either poet will be eager to claim them.

I am, Sir, yours truly,
DUNDAS GRANT.
18, Cavendish Square, London.
October 3rd, 1912.

OBITUARY.

DR. E. WOAKES, OF FAREHAM.

WE regret to announce the death of Dr. Edward Woakes, of Wimpole Street, London, and Belvoir House, Fareham, Hants., which took place on the 30th ult., in his 76th year. The deceased, who was well known as an aurist and laryngologist, qualified as M.R.C.S. and L.S.A. in 1858, becoming M.D.Lond., in 1863. He was formerly House Surgeon at St. Thomas's Hospital. He then joined his father at Luton in general practice, founding Luton Cottage Hospital, now known as the Bute Hospital. Returning to London in 1876, he decided to specialise in diseases of the ear, nose and throat. He was appointed Aural Surgeon to the London Hospital and Lecturer in Aural Surgery in the Medical School, and he was also attached to the staff of the Golden Square Throat Hospital. Dr. Woakes assisted in founding the London Throat Hospital in Great Portland Street. His treatment for adenoids and nasal polypus marked a considerable advance on previous methods, and he wrote on nasal diseases and kindred subjects. Dr. Woakes' connection with Fareham commenced in the year 1894. He took a lively interest in local affairs, connecting himself with many social and philanthropic institutions. In politics he was a Liberal, and among the positions he held were Vice-Presidencies of the South Hants Liberal Association and the Fareham Liberal Association. Owing, however, to his serious illness he had not been able to take a very prominent part in the life of the town during the last year. His wife died in 1909. One of his sons continues his father's practice.

DR. E. M. LIGHT.

THE death took place at Cromer on October 1st, of Dr. Edwin Mellor Light, of Ebury Street, Eaton Square, S.W., chief Medical Officer of the Prudential Assurance Company, in his 52nd year. Dr. Light, who received his medical education at Cambridge, Leeds and St. Thomas's Hospital, qualified as L.R.C.P.Lond., in 1887, becoming M.R.C.S. in 1889. He graduated M.A., M.B., B.C.Cantab., in 1887-8. He obtained an exhibition at St. Thomas's Hospital for proficiency in natural science, and he afterwards held the post of Clinical Assistant in the Throat Department at St. Thomas's. He then held other appointments at the Hospital for Women, Soho Square, the Brompton Hospital for Consumption, and he was formerly resident medical officer, pathologist and house physician at the Leeds General Infirmary. Dr. Light was a well-known figure in the insurance world, being a member of the Life Assurance Medical Officers' Association as well as the Association Internationale des Médecins Experts de Compagnies d'Assurance.

SPECIAL REPORTS.

THE IRISH INSURANCE COMMISSIONERS AND THE MEDICAL PROFESSION.

IN the IRISH SUPPLEMENT to the MEDICAL PRESS AND CIRCULAR of last week, we found it our duty to comment on both the manner and matter of an interview granted by two of the Irish Insurance Commissioners—the Chairman, Mr. Glynn, and Dr. Maguire—to a representative of the *Irish Times*. We singled out a few of several misrepresentations made by the Commissioners with regard to the attitude and demands of the medical profession. Mr. Glynn has now thought right to reply to our criticisms in another interview granted last Saturday to a representative of the *Irish Times*. As Mr. Glynn attempts to defend some of his misrepresentations, it is necessary again to consider his arguments. We had been charitable enough to hope that some of the more manifest blunders of the first interview were due to the reporter rather than to the Commissioners; but Mr. Glynn states now that the report of the first interview "was accurate in every particular."

"The interveiw was given," he goes on, "after full consideration of my position as a civil servant and as chairman of the Commission." We disagree with Mr. Glynn's views as to the propriety of civil servants giving interviews, especially for the discussion of controversial points; but what is more important is that, neither before nor since the publication of the first interview has he taken the care to verify the statements then made.

In the first place, Mr. Glynn discusses the demand which he said was made by "the doctors" of a payment of 3s. per head of all insured persons to cover the cost of certificates. We pointed out that this demand was never made by any representative body of the profession, and, in fact, was repudiated by the first representative meeting of the profession which heard of it. Mr. Glynn admits now that it was made by certain medical members of the Advisory Committee, whom he designates "representatives of the Conjoint Committee on the Advisory Committee." The members of the Advisory Committee are, as everyone knows, nominated by the Commissioners. But whatever may have been the authority for the demand when made, it is now obsolete, and in reviving it Mr. Glynn goes against his own statement that "the object of the interview was not to endeavour to place the doctors in the wrong."

He next comes to the statement of the Commissioners that a fee of 7s. 6d. was demanded by the Dublin Medical Committee for, as he puts it, "introducing a patient to a tuberculosis dispensary"—viz., "2s. 6d. for a certificate and 5s. for a report." Mr. Glynn does not yet see his blunder. As the Commissioners have issued regulations which require a claimant for sanatorium benefit to present a full medical report on a specified form, and do not in any case require a separate certificate, the fee for the latter disappears, and the fee that remains—5s. for the report— has been sanctioned by the Commissioners.

In the first interview the Commissioners were reported as making one statement so wild that we charitably thought their remarks had been misunderstood by the reporter. We were wrong. The statement ran: "Throughout the country there were several instances of doctors being prepared to act on the terms laid down by the British Medical Association, but they were afraid to do so, lest they should be struck off the *Medical Register*." Mr. Glynn supports this absurdity as follows:—"I can only refer to the meeting of the Dublin medical practitioners, presided over by the President of the Royal College of Surgeons, and reported in the June number of the *Journal* of the Irish Medical Association. The third resolution is as follows:—'That a 'black list' be formed, on which the name of every practitioner who refuses to sign the pledge will be placed. This to be published in the Medical Colleges; and it is understood that everyone who appears thereon shall be boycotted by means known to the medical profession.' "

Even had a resolution in such terms been passed, it would give no support to the statement made by the Commissioners. But we can assure Mr. Glynn and our readers that no resolution in such terms was passed at any meeting of the practitioners of Dublin.

Mr. Glynn finds fault with our remark that the profession in Ireland has always been anxious to help in the administration of the sanatorium benefit. He says that "co-operation is only offered on condition that the terms of the medical profession be accepted." The point is a niggling one. What the profession demands is that the benefit should be run upon such lines as can be approved by the profession, and, as we pointed out, medical members of the various insurance committees are at present performing their unpaid duties with regard to the sanatorium benefit with zeal and discretion. How long they can continue to do so is a matter for the Commissioners.

Discussing domiciliary treatment under the sanatorium benefit, Mr. Glynn says:—"The point that seems to have been lost sight of by the medical profession is that domiciliary treatment was not really part of the original plan connected with the scheme, and was inserted to meet the wishes of the profession, which complained that there was a danger of local medical practitioners having their private patients taken from them." So far from our having lost sight of this point, we never saw it before. What is "the original plan" of which Mr. Glynn speaks? Where can it be seen and studied? Where and when did the profession make the alleged complaints? Is there anything in domiciliary treatment alien to the clauses of the Insurance Act, which speaks of "treatment otherwise than in sanatoria or other institutions?" Reference is made to domiciliary treatment side by side with other forms of treatment in the various papers issued by the Irish Commissioners—*e.g.*, Form Med. 2, Memo. No. 112/I.C. Moreover, the Interim Report of the Departmental Committee on Tuberculosis, which is generally regarded as laying down the lines on which sanatorium benefit should be administered declares:—

"[Par. 28]. The following conditions are essential . . .

"(3) In the case, at all events, of insured persons, patients living at home who are treated at or under the supervision of the dispensary should generally be placed, where they are willing, under the care of some general practitioner who will carry out the necessary home treatment in consultation with the chief tuberculosis officer of the dispensary, and who will, where the patients are insured persons, be paid out of the funds available for sanatorium benefit."

We find, therefore, that what the Departmental Committee regard as an essential, is, according to the Chairman of the Irish Insurance Commission, "not really part of the original scheme," but something "inserted to meet the wishes of the profession!" We hesitate to assume that Mr. Glynn, like the man in the street, has fallen into the error of regarding the statutory term "sanatorium benefit" as meaning benefit of or treatment in a sanatorium, and that, therefore, treatment outside a sanatorium is "not really part of the original scheme."

Mr. Glynn concludes:—"The charge that my action tends to hamper the administration of the Act is ridiculous, because all I have done is to do some sums in arithmetic, the results of which have evidently greatly displeased the Medical Press."

We are not at all concerned with Mr. Glynn's arithmetic as a mental exercise. He had, however, chosen to compare figures which cannot honestly be compared. We repeat our criticism of last week:—"In order, further, to cast ridicule on the suggestions of the Dublin Committee, the Commissioners contrast the sums required to deal with the *insured and their dependents* if the suggestions were adopted, with those required to deal with the *insured alone* on their own scale of fees. Naturally there is a considerable difference, but the argument is hardly honest."

We have no option but to conclude as before "that this interview has done more to hamper the administration of the sanatorium benefit in Ireland than any single incident since the Bill was introduced to the House of Commons."

At the same time, while regretting Mr. Glynn's impenitence in his errors, we are glad to note that the tone of his second interview is hardly as truculent as that of his first. We may add that there are other fallacies in his statement than those on which we have commented, and that we shall have to return to the subject at an early date.

REVIEWS OF BOOKS.

CEREBRAL DECOMPRESSION. (*a*)

All medical men regard with satisfaction the extraordinary advance in abdominal surgery during recent years, but they do not usually consider the fundamental reasons for surgical success in this region, nor apply their conclusions to the surgery of other parts of the body. Early diagnosis, the evacuation of abscesses, palliative measures, which by their adoption have done so much for the treatment of abdominal disease, have, in the hands of a few, produced great improvements in the treatment of intracranial lesions. We welcome this short address on the possibilities afforded by a timely decompression operation. The arguments presented are essentially sound, and should be instinctively appreciated by the general practitioner, as well as by the surgeon. The author points out that too many cases of cerebral tumour are allowed to progress to inevitable agony, blindness, and death, when it is in the power of the average competent surgeon to relieve the symptoms, if not to eradicate the disease. The author has certainly made an effective point and one worthy of wide-spread acceptation. The cases quoted with regard to decompression operations for apoplexy are highly suggestive, and ought to make us more inclined to give these patients a chance of relief before paraplegia becomes permanent. The results of drainage in purulent basal meningitis seem to warrant more active treatment than has been the custom in the past. This book fulfils a distinct need for the practitioner, and is a most excellent guide to the treatment of intracranial lesions.

ELEMENTS OF PRACTICAL MEDICINE. (*b*)

We believe in the short text-book as a means of giving the student a bird's-eye view of his subject before he embarks on the study of greater detail. Professor Carter's little book will serve as an admirable introduction, and it must be a matter of personal opinion regarding what is to be included and what left out. For our own part, we think the space occupied by the opening section on general pathology

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(*a*) "Cerebral Decompression in Ordinary Practice." An address by Charles A. Ballance. Pp. 71, illustrated. London: Macmillan and Co. Price 2s. 6d. net.

(*b*) "Elements of Practical Medicine." By Alfred H. Carter, M.D. Tenth edition. Pp. 683. London: H. K. Lewis. Price 9s. net.

might have been better employed. Most readers of this book will have already passed an examination in pathology demanding a greater knowledge than the section imparts. We should also have preferred that the therapeutic index at the end of the book had been embodied in the text. In its isolated position it may either be overlooked or used for cramming purposes. But criticism stands disarmed before a tenth edition.

NEW PHYSIOLOGY IN SURGICAL AND GENERAL PRACTICE. (*a*)

At first blush it would appear unfortunate that such a work as this should be necessary, but a glance through current physiological literature suffices to convince one that it is not the sort of reading that the busy practitioner is likely to take up and digest for himself.

Dr. Rendle Short is in the position of having a first-hand knowledge of physiological progress and of the demands of practice. He has, further, the gift of clear exposition, so that he has been able to place in the hands of practitioners an account of recent physiological work which is likely to stand him in good stead, and by applying physiological advances to practice he also indicates directions in which further physiological inquiry is desirable.

Sir William MacEwan's views on growth of bone are clearly set forth, and there seems little doubt that the theory that periosteum has an osteogenic function must be revised. There are useful chapters on shock, the internal secretions, digestion, chloroform poisoning, diabetes, acidosis and nerve injuries. We welcome the statement that sedative drugs applied to the unbroken skin are useless except as wet dressings.

From the point of view of the physiologist, the criticism might be made that the information on some topics is rather meagre, and the reader will certainly interject a good many "whys" after some rather dogmatic sentences; but, after all, the early appearance of this edition is clear evidence that the book is one the practitioner wants.

Among minor criticisms we might note that on page 20 we are told not to repeat a dose of pituitary, but no explanation is forthcoming till page 64 is reached. "Resuscitation" would be, on many grounds, a better term than "resurrection" on page 21. The reader might be entrusted with the formula for Ringer's solution (p. 31). Sweetbread (p. 120) is thymus, not pancreas, although it may be defined differently by a slum butcher.

On page 164 the author declines to explain the terms "A.C.C." and "K.C.C.," "because only an expert would undertake the investigation of the electrical reactions." We should be sorry for a student who could not define them in his professional examination, either in physiology or in medicine.

Altogether this is a most useful and readable little book, and we hope that there will be both a demand for and a supply of further editions, which will enable the practitioner to utilise to advantage the stream of energy constantly flowing from our scientific laboratories.

PSYCHOLOGICAL MEDICINE. (*b*)

In this book we have a good account of psychological medicine in reasonable bulk. Due respect is paid to authority even when it does not accord with the author's experience, and little fault is likely to be taken with the treatment of any part of the subject. The chapter on the relationship of insanity with law and that on treatment are particularly good, although we find no guidance as to the management of seizures in general paralysis.

We take exception to the author's statement that reflex actions have no psychological concomitants, and that they are all carried out by the lowest level of the nervous system. It would be more in accord with modern physiology to say that reflexes may pass through any part of the nervous system, the presence or absence of psychical concomitants being a matter of accident as far as the reflex action is concerned. The book is well worthy of better revision than it seems to have received. In the first place, while subdivision into paragraphs has ensured completeness, there is a good deal of unnecessary repetition, which the recurrence of such phrases as "the scaffolding upon which the mind of man is built" serves to emphasise. Most irritating is the frequent reference to matters treated *elsewhere*. A note of chapter or page would have been a graceful concession to the reader.

There is a good deal of careless writing. We may instance a number of ruthlessly split infinitives, and (p. 226) "at the risk of being thought tedious, the student may be reminded."

We note a fair crop of printer's errors.—P. 92, heart palate; p. 175, "Frequent pregnancies . . . may terminate insanity"; p. 235, *Rhomberg;* p. 312, *Huntingdon's* chorea; p. 329, *aphesisas;* p. 409, *recrod.* We have pleasure in recommending the book, and such minor blemishes as we have noticed will not detract from its value to those who use it as a text-book or work of reference. There are several beautiful plates.

FIRST-YEAR NURSING. (*a*)

This book on first-year nursing, by an American author, should be a great help to probationers during their training, and is especially good in that it aims solely at giving instruction in *nursing*, not in medicine and surgery watered down to suit the supposed requirements of the nurse, a most common fault in many nursing manuals. With this book to refer to, much that is puzzling to understand in what is done around her during the early days of her training will become clear to the young nurse, and its admirable instructions on various points of ethics and etiquette ought to save her from many a *faux pas*. Chapter XIV. on Observation of Symptoms, is a valuable one, deserving of careful study, for no nurse can be a reliable help to a doctor unless she is a shrewd observer and cultivates the power of putting her observations into clear words. We can heartily recommend the book to all probationers who are anxious to make the best use of their time in hospital.

MEDICAL NEWS IN BRIEF.

The Entrance Scholarships at the Medical Schools.

The two University entrance scholarships of the St. George's Hospital Medical School have been awarded as follows.—Scholarship of 70 guineas—Rhys Trevor Jones (University College, Cardiff); scholarship of £50—Tom S. Nelson (Univeristy College, Oxford).

The Goldsmid Entrance Exhibitions in Anatomy and Physiology for the winter session at University College Hospital Medical School have been awarded to Mr. M. S. Woolf, M.A., Birmingham University, and Mr. W. T. Collier, B.A., Balliol College, Oxford.

The following Entrance Scholarships and Prizes have been awarded at Guy's Hospital Medical School:—

Senior Science Scholarship for University Students.—(£50), C. P. Symonds, New College, Oxford. Junior Science Scholarships.—£120, J. E. E. de Robillard (Preliminary Science Class, Guy's Hospital); and £60, H. J. Bensted, Birkbeck College, and J. C. C. Howe (Preliminary Science Class, Guy's Hospital), equal. Entrance Scholarships in Arts.—£100, W. H. Steavenson, Cheltenham College; and £50, F. R. Leblanc, Royal College, Mauritius.

The following entrance scholarships have been awarded at the Middlesex Hospital Medical School:—University Scholarship, S. D. Kilner; First Entrance Scholarship, J. D. Dyson; Second Entrance Scholarship, F. C. Mason; Third Entrance Scholarship, E. H. Lake; Freer Lucas Scholarship (Epsom Col-

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(*a*) "The New Physiology in Surgical and General Practice." By A. Rendle Short, M.D. Second edition. Pp. 244. Bristol: John Wright and Sons. 1912. Price 5s. net.

(*b*) "Psychological Medicine." By Maurice Craig, M.A., M.D. Second edition. Pp. 468. London: J. and A. Churchill. Price 12s. 6d. net.

(*a*) "First Year Nursing." By Minnie Goodnow, R.N., Formerly Superintendent of the Women's Hospital, Denver. Pp. 328. 71 illus. Philadelphia and London: W. B. Saunders, Co. Price 6s. 6d. net.

lege), W. B. Gabriel; New Zealand Scholarship, W. P. Johnston.

The Middlesex Hospital Medical School Awards.

The following is a list of the awards of the Entrance Scholarships made at the opening of the winter session at this school last week:—University Scholarship, S. D. Kilner; First Entrance Scholarship, J. D. Dyson; Second Entrance Scholarship, F. C. Mason; Third Entrance Scholarship, E. H. Lake; Freer Lucas Scholarship (Epsom College), W. B. Gabriel; New Zealand Scholarship, W. P. Johnston.

Central Midwives Board.

A meeting of the Central Midwives Board will be held at the Board Room, Westminster, to-morrow (Thursday), immediately on the termination of the proceedings of the Finance Committee summoned for that day, when reports of the various standing committees will be read, and, among other business, a letter from the Lord of the Council will be read, fixing the scale of the present Secretary's salary at the following rate: —£600, by annual increments of £25 to a maximum of £750; to take effect from April 1st, 1912.

University of Cambridge.

Diploma in Tropical Medicine and Hygiene.—The following candidates, having satisfied the examiners, are entitled to receive the diploma:—J. F. Corson, G. I. Davys, G. G. El-daba, C. A. Gourlay, J. E. L. Johnston, W. Lapsley, W. F. M. Loughnan, F. C. McCombie, A. C. N. McHattie, A. R. Neligan, A. H. Owen (Caius), P. M. Rennie, H. E. Smith, B. Spearman (Caius), C. J. Stocker (Trinity), C. L. Strangman, and W. Telfer.

Epsom College Speech Day.

Epsom College Speech Day, which had been postponed from July 27, was celebrated on Saturday, when the Lord Mayor of London, who was accompanied by the Lady Mayoress and the Sheriffs, attended to distribute the prizes. Before the distribution the visitors were entertained at luncheon, Sir William Church, Bart., chairman of the council, presiding.

The Headmaster, the Rev. T. N. H. Smith-Pearse, in proposing the toast of "The Lord Mayor and Sheriffs," said they had all been most anxious that the first time a member of the medical profession held the great office of Lord Mayor of London he should be invited to Epsom College, which was closely connected with the medical profession.

The Lord Mayor, in replying, said he felt when he accepted the office of Lord Mayor that anything he could do to lift up his profession should be done. If he had not been a medical man he should have hesitated before he accepted the position, and should finally have decided not to accept it. But he felt he should like the whole world to know that medical men could attend the Council Chamber and advise in the position of Chief Magistrate.

The Hospital Saturday Fund.

At the quarterly meeting of the Board of Delegates of the Hospital Saturday Fund, held on Saturday evening at the offices, Gray's Inn Road, Mr. Harry Gower presiding, it was reported by the secretary (Mr. A. W. Davis) that the receipts to date had amounted to £18,320, a decrease of £271 upon last year at the same period. Arrangements have been completed for the annual collection on Saturday next, the 12th inst.

Plague in the Azores.

A semi-official note declares the existence of bubonic plague at the Angra Do Heroismo islands in the Azores. The Government have decided to send from Lisbon some serum and also, if necessary, hospital helpers and nurses. The Minister for Foreign Affairs will officially communicate to all foreign nations the existence of plague at Angra.

London—Bath Spa Express.

A new service to Bath, specially designed for the comfort and convenience of visitors to that well-known health resort, was inaugurated on October 1st, when the first journey was made of the "Bath Spa Express." The express leaves Paddington every morning at eleven o'clock, accomplishing the journey to Bath in one hour and three-quarters, a non-stop run through the beautiful scenery of the Thames Valley and across the Wiltshire Downs. For the convenience of invalids, we are asked to state that seats may be reserved in advance, and a stewardess is carried to attend to the comfort of ladies travelling to Bath for the cure. Bath has been very much before the medical profession and the public lately, and facilities afforded by such a train for easy and luxurious travel, will be appreciated by cure-guests to the historic health resort.

The Naval Medical Service.

At the examination for the Naval Medical Service held on September 30th and October 1st, 2nd, and 3rd, ten candidates were successful and obtained the following marks:—Mr. A. E. Malone, 1,663; Mr. H. M. Whelan, 1,558; Mr. R. F. P. Cory, 1,543; Mr. H. St. C. Colson, 1,503; Mr. P. L. Gibson, 1,485; Mr. G. A. Finegan, 1,390; Mr. F. St. B. Wickham, 1,285; Mr. J. T. D. S. Higgins, 1,258; Mr. J. B. Boal, 1,208; Mr. S. Punch, 1,200. The possible number of marks for the examination was 2,400.

Royal College of Surgeons of England.

The following demonstrations of specimens in the Museum will be given in the Theatre of the College on the dates named. The demonstrations are intended for advanced students and medical practitioners:—

Friday, October 18th, 5 p.m. Prof. Arthur Keith: Specimens recently added to the Musuem—(1) Skeleton of a boy who suffered from the disease described by Mr. Hastings Gilford under the name of progeria. (2) Skeleton of a child the subject of infantilism (ateliosis). Other specimens of surgical interest exhibiting defective growth.

Monday, October 21st, 5 p.m. Mr. S. G. Shattock: Specimens illustrating diseases of the genito-urinary organs.

Wednesday, October 23rd, 5.30 p.m. Mr. J. F. Colyer: John Hunter's specimens illustrating the formation and growth of teeth.

Friday, October 25th, 5 p.m. Prof. Arthur Keith: Specimens recently added to the Museum—Specimen illustrating the result in a case where the condition of imperforate anus was relieved. Specimens illustrating the comparative anatomy of the prostate. Sexual organs of eunuchs; undescended testicles.

Monday, October 28th, 5 p.m. Mr. S. G. Shattock: Specimens illustrating diseases of the genito-urinary organs.

Wednesday, October 30th, 5.30 p.m. Mr. J. F. Colyer: John Hunter's specimens illustrating the natural history of the human teeth.

Friday, November 1st, 5 p.m. Prof. Arthur Keith: Specimens illustrating the comparative anatomy of the cæcum and appendix; of the gall-bladder; of the thyroid; and of the tonsil.

Monday, November 4th, 5 p.m. Mr. S. G. Shattock: Specimens illustrating diseases of some of the ductless glands.

Wednesday, November 6th, 5.30 p.m. Mr. J. F. Colyer. Specimens illustrating periodontal disease (pyorrhœa alveolaris) as seen in man, wild animals in captivity and domesticated animals.

Royal College of Physicians of Edinburgh, Royal College of Surgeons of Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow.

The following candidates having passed the requisite examinations of the above Board in October, were admitted Diplomates in Public Health:—Edward L. Middleton, Alexandra B. MacCallum, John D. Ingram, John C. MacCallum, Dewan Jai Chand, William G. Macdonald, Kate Fraser, Jane H. McIlroy, George C. Strathairn, Daniel C. Adam, Alexander J. Ewing, George V. T. McMichael, and Peter Allan.

Surg.-Gen. L. E. Anderson has been appointed Deputy Director of Medical Services, Irish Command.

NOTICES TO CORRESPONDENTS, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

A FRAGMENT.

THERE is nothing like following out the doctor's orders. The Doctor said to Mrs. Perkins, whose husband was lying ill:—

"Has he had any lucid intervals?"

Mrs. Perkins replied at once: "'E's 'ad nothin' except what you ordered, Doctor."

DR. W. M. (Hunts).—The question you raise cannot be finally settled until the profession is more unanimous with regard to the propriety of having pay-wards in general hospitals at all. We do not think that the mere giving of a donation upon discharge brings the donor into the category of a "paying patient."

THE HEALTH OF NEWCASTLE-UPON-TYNE.

ACCORDING to the thirty-ninth annual report of the Medical Officer of Health of the City and County of Newcastle-upon-Tyne, Dr. Henry E. Armstrong, the death-rate (uncorrected) of Newcastle from "all causes" during the year 1911 was 17.5 per 1,000 population. The corrected rate is 16.4. The population of the city shows a decrease of 18,690, as compared with that of the previous year, which has the effect of increasing the general rate of mortality (uncorrected) by 1.2 per thousand. The death-rate from the chief zymotic diseases was 1.83 per 1,000 population, as compared with 2.27 for the 77 largest English towns. The purity of the milk-supply has received much attention from the staff of the Health Department, and the city is to be congratulated in being controlled by an energetic Sanitary Committee, which have always consistently supported the actions and proposals of their Medical Officer.

THE MAN OF THE FUTURE.

WE are all familiar with housemaid's knee, the lawn-tennis elbow, the bicycle glare, and rubber neck, and now we are making acquaintance with the motor-'bus spine, which is a jumbled condition of the vertebræ. When he has acquired all these and one or two more, the man of the future will indeed be a thing of beauty.—*Sketch.*

Meetings of the Societies. Lecturs, &c.

WEDNESDAY, OCTOBER 9TH.

UNITED SERVICES MEDICAL SOCIETY (Royal Army Medical College, Grosvenor Road, S.W.).—5 p.m.: Fleet-Surgeon Bassett-Smith, C.B., R.N.: Presidential Address. Captain Sylvester-Bradley, R.A.M.C.

HUNTERIAN SOCIETY, London Institution (Finsbury Circus, E.C.).—8.30 p.m.: Council Meeting.—9 p.m.: Dr. F. Taylor.

THURSDAY, OCTOBER 10TH.

NORTH-EAST LONDON CLINICAL SOCIETY (Prince of Wales's Hospital, Tottenham, N.).—4.15 p.m.: Sir J. Rose Bradford, Opening Address.

ROYAL SOCIETY OF MEDICINE (OBSTETRICAL AND GYNÆCOLOGICAL SECTION) (1 Wimpole Street, W.).—8 p.m.: Cases and Specimens by Dr. Maxwell and Dr. Henry Briggs (Liverpool). Paper by Dr. Thomas Wilson (Birmingham): Gelatinous Glandular Cysts and the so-called Pseudomyxoma of the Peritoneum.

FRIDAY, OCTOBER 11TH.

ROYAL SOCIETY OF MEDICINE (OBSTETRICAL AND GYNÆCOLOGICAL SECTION) (1 Wimpole Street, W.).—4.45 p.m.: Special General Meeting of Fellows. (1) To Ballot for the following Candidates for Fellowship: Rachel Nathaniel Cohen, M.B., F.R.C.S.I.; William Edwin Haigh, F.R.C.S.; Gerald Herbert Johnston, L.R.C.P., L.R.C.S.; Stephen George Longworth, L.R.C.P.; William Love, F.R.C.S.I.; Robert Barclay Ness, M.B., C.M.; Raymond Broadley Etherington Smith, M.B., B.C., F.R.C.S.; James Greig Soutar, M.B., C.M.Ed.; Frank Pearce Sturm, M.Ch., M.B.; Margaret Grace Thackrah, M.B., B.S.; Richard Thorne Thorne, M.D., B.S. (2) To consider a Resolution, proposed by the Council, with regard to the naming of rooms in the new House.

ROYAL SOCIETY OF MEDICINE (CLINICAL SECTION) (1 Wimpole Street, W.).—8.30 p.m.: Cases by Dr. A. M. Gossage, Dr. H. Morriston Davies, Dr. W. P. Herringham, and Dr. F. Parkes Weber.

MONDAY, OCTOBER 14TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8 p.m.: General Meeting.—8.30 p.m.: The incoming President, Sir W. Watson Cheyne, Bt., C.B., F.R.S., will deliver the introductory address, to be followed by a paper by Dr. T. J. Poynter and Dr. H. C. J. Pedler, on "A Case of Anæmia of the Pernicious Type with Acholuric Jaundice."

Appointments.

GREEN, EDWIN, M.R.C.S., L.R.C.P., a Medical Referee under the Workmen's Compensation Act, 1906, for County Derbyshire, Court Circuit No. 19.

GREENER, ANNIE C., M.B., Ch.B.Edin., Resident Medical Officer to the Blackburn Union.

MACNAMARA, J., L.R.C.P., and S.Edin., L.F.P.S.Glas., Certifying Surgeon under the Factory and Workshop Acts for the Bellananagh District of the county of Cavan.

MAPLETON, HENRY BANBURY, M.D., C.M.Edin., D.P.H.Lond., Medical Officer of Health by the Newton Abbot (Devon) Rural District Council.

MURPHY, CHRISTOPHER FRANCIS, L.R.C.P., L.R.C.S., L.M.Irel., Medical Officer for the North Chardstock District by the Axminster (Devon) Board of Guardians.

SEALY, ARTHUR LESLIE MARMADUKE, M.B., C.M.Aberd., Medical Officer for the Ipplepen District by the Newton Abbot (Devon) Board of Guardians.

VESSELOVSKY, VICTOR C., M.R.C.S., L.R.C.P., House Surgeon at the Hampstead General and North-West London Hospital.

WOOLF, A. E. M., M.B.Cantab., F.R.C.S.Eng., Medical Referee under the Workmen's Compensation Act, 1906, for County Court Circuit No. 58, to be attached more particularly to Tavistock and Okehampton County Courts.

Vacancies.

Hants County Asylum.—Third Assistant Medical Officer. Salary £200 per annum, with furnished apartments, board, washing, and attendance. Applications to the Visiting Committee, Hants County Asylum, Fareham.

Warwick County Asylum.—Second Assistant Medical Officer. Salary £175 per annum, with board, apartments, and laundry. Applications to Dr. Miller, Hatton, Warwick.

Royal Victoria Infirmary, Newcastle-upon-Tyne.—Resident Medical Officer. Salary, £200 per annum, with board and residence. Applications to the House Governor and Secretary, Royal Victoria Infirmary, Newcastle-upon-Tyne.

Ecclesall Bierlow Union.—Resident Assistant Medical Officer. Salary £200 per annum, with board, washing, and furnished apartments. Applications to J. E. Moulding, Clerk to the Guardians, Union Offices, "The Edge," Sheffield.

Gordon Hospital, Vauxhall Bridge Road.—House Surgeon. Salary £50 per annum. Applications to C. St. Amory, Secretary. (See advt.)

Births.

BURGESS.—On Sept. 18th, at 10 Riggindale Road, Streatham, the wife of Dr. H. Lynch Burgess, West African Medical Service, of a son (Gerald).

GOODING.—On Oct. 3rd, at Ashton Lodge, South Norwood, Edith, the wife of Simonds Gooding, M.D., M.A. (Cantab.), of a son.

HANWELL.—On Oct. 2nd, at 40a Hyde Park Gate, S.W., the wife of Gerald Hanwell, M.R.C.S.,Eng., L.R.C.P.Lond., of a son.

RAIT.—On Sept. 30th, at "Woodstock," 22 Lyndhurst Gardens, Hampstead, N.W., the wife of Major J. W. F. Rait, I.M.S., of a daughter.

Marriages.

GREEN—COWAN.—On Oct. 1st, at St. Peter's, Brockley, Charles David Green, M.D.Lond., F.R.C.S.Eng., of Romford, to Gertrude, youngest daughter of Demetrius and Louisa Cowan, of Wickham Road, Brockley.

HERTZ—RIDDIFORD.—On Oct. 2nd, at St. Thomas's, Portman Square, Arthur Frederick Hertz, M.D., F.R.C.P., youngest son of the late William M. Hertz, of Bradford, and Bowden, Cheshire, to Cushla, youngest daughter of the late Frederick Riddiford and of Mrs. Riddiford, of New Zealand.

LEA-WILSON—LUTMAN.—On Sept. 30th, at the Church of St. John Baptist, Pinner, Basil H. C. Lea-Wilson, M.R.C.S., L.R.C.P., son of the Rev. A. Lea-Wilson, Vicar of Lesvesden, and grandson of the late C. Lea-Wilson, Esq., of Beckenham, Kent, to Muriel, daughter of Mrs. Lutman, of Pinner Wood House, Pinner.

M'EWEN—CLARK.—On Oct. 2nd, at the Cathedral, Calcutta, Thomas M'Ewen, L.R.C.S.P.E., Joyhing, N. Lakhimpur, son of the late Thomas M'Ewen, Baldernock, to Lucie Foster, daughter of the late J. T. Clark, Esq., of Ilderton, Alnwick, and Mrs. Clark, Moorend, Newbiggin-by-Sea, and granddaughter of the late J. Scott, Esq., of Coneygarth.

Deaths

BETTS.—On Sept. 6th, suddenly, at a nursing home, Edward George Betts, M.R.C.S., of 37 Cavendish Square, W.

CROWLEY.—On Oct. 5th, at "Lyndhurst," Thames Ditton, Deputy-Surgeon General T. J. Crowley, R.N., eldest son of the late Dr. Crowley, Kilbrittan, Co. Cork.

HOWIE.—On Oct. 3rd, at Beamsville, Ontario, after an operation, John Coulson Howie, M.A., M.D., eldest son of Rev. Robert Howie, D.D., of Glasgow.

LIGHT.—On Oct. 1st, at Cromer, of septic poisoning, Edwin Mellor Light, M.A., M.D., B.C.Camb., Chief Medical Officer of the Prudential Assurance Co., of 125 Ebury Street, Eaton Square, S.W., in his 52nd year.

PARSONS.—On Oct. 2nd, at Canon Pyon, Hereford, Louisa Anne, wife of H. Franklin Parsons, M.D., of Oakhyrst, Park Hill Rise, Croydon, aged 66.

WOAKES.—On Sept. 30th, at Belvoir, Fareham, Hants, Edward Woakes, M.D., late of Harley Street, aged 75 years.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, OCTOBER 16, 1912. No. 16.

NOTES AND COMMENTS.

The Reticence of "Truth." IN a recent issue we commented upon the fact that *Truth* had spoken of THE MEDICAL PRESS AND CIRCULAR as one of the most narrow-minded of the medical journals. As there was not a word of support to this apostrophe, we pointed out that in form it savoured of the methods of simple abuse, and was unworthy of the methods instituted in that journal by the late Mr. Labouchere, who was always ready with chapter and verse, and with the methods of formal reasoning, to support views that, however extreme, were never obscure nor frankly abusive. To this challenge the erstwhile doughty *Truth* has answered never a word, but has published a whole page advertisement of Sandow, who professes to cure all sorts of diseases by a system of physical exercises, and publishes a book dealing with diseases of the nervous, circulatory and all other ills to which flesh is heir, including the special ailments of women! With such an advertisement in its pages it is hardly surprising that *Truth* should regard orthodox medical men and their internal disciplinary methods as a mere superfluity of airs and graces when they can go to such heaven-gifted geniuses as Sandow and Barker, who between them apparently can cure any human malady, and, incidentally, put a mint of money into editorial coffers. There is nothing illegal in the transaction, and it may be due to sheer narrow-mindedness if we insist that members of our own profession should not be allied with the two medically uneducated individuals in question. At any rate, we have the General Medical Council and the Privy Council at our back.

The Advantages of Isolation. IT is, of course, evident to all that there are material advantages attached to the position of those medical men who do not join with the overwhelming majority of their professional brethren in refusing to serve under the National Insurance Act in its present form. Indeed, the campaign may be said to have assumed a determined policy from the day of the "great betrayal" of the British Medical Association by one of its prominent officials. At the end of September it was announced by a London newspaper—the *Daily Express*—that of the four medical men in Scotland known at that time to have agreed to work under the Act, two of them, to wit, Dr. Knight and Dr. Cullen, had received "excellent appointments." A curious fact commented on by the same journal is that "The National Insurance Medical Association," of which Charles Frederick Knight, M.D., is the Organising Secretary, has advertised for 1,000 motor cars, for what precise purpose is not known. A newspaper interviewer failed to extract any more detailed information from Dr. Knight, although with practical commonsense he fixed on the economics of the situation. The thousand cars, even at the low price of £250 apiece, work out at a quarter of a million of money. Dr. Knight is said to have replied that a number of wealthy persons were interested in the Association and the money would be forthcoming. Here the story ends and the motor-car scheme remains "wrop up in mystery." If funds are forthcoming in this lavish way for those who elect to join the opposition it may well cause the weak-kneed among our ranks to waver. Fat posts, motor-cars, and the prospective favours of a grateful administration may well give pause to a practitioner struggling to make both ends meet.

Hospitals and the Insurance Act. THE important matter of the relation of the voluntary medical charities to the Insurance Act has been, to a great extent, overshadowed by the wider question of the administration of medical benefits. Assuming that the co-operation of the medical profession is once secured in that direction, the hospital problem will at once demand careful attention. Members of the honorary staff of those institutions who have hitherto given their services gratuitously to the hospital patients cannot be expected to do so any longer under the altered conditions introduced by the Act. If the rest of the medical profession is to be paid by the State for attendance on insured persons, there can be no logical reason for the non-payment of medical men because they happen to be treating the same class of patients within the four walls of a hospital. It seems tolerably certain that the crowded out-patient rooms of the medical charities will be, to a great extent, depleted when the Act comes into operation, and such a result is likely to be an unmixed blessing to the honorary staff as well as to the patients. The out-patient department will then, in all probability, drift more and more into the position of a consultative organisation. In that case what will happen to the members of the medical staff who are clearly entitled to a readjustment of the terms of their appointment in view of the State aid granted to the large section of the public from whom hospital patients are drawn?

The Position of the Honorary Staff. So far as one can judge, hospital surgeons, physicians and specialists will always be required, and if their services are necessary to the State they will have to be paid at the higher rates of remuneration appropriate to their specialised skill and their long and costly training. Some day it seems not unlikely that the whole of the hospital service of the country may come under the control of the State, and we trust the opportunity of holding paid appointments under that system will be more widely available to medical men than it is under existing conditions. One conviction seems to be steadily gaining ground, namely, that the Insurance Act has sounded the knell of gratuitous hospital work. The economic principle underlying the running of medical charities by the unpaid services of medical men has always seemed to us unsound. In many cases it inflicts great hardships upon young men who aspire to a place in the higher ranks of the profession. During the discussions that have waged of late round the Insurance Act it has been often urged that it is to the benefit of the community to have a prosperous and well-paid class of medical practitioners to attend the class of insured persons. Surely it is of no less importance to the community to have an ample supply of consultants and specialists sufficiently well off to carry on their progressive work with the requisite amount of vigour and thoroughness. It is to be hoped that every member of the honorary staff of the medical charities in the United Kingdom will find himself, in future, remunerated for services that are indispensable to society.

The Ruling Passion.

It is a well-known psychological fact that stimuli, applied when the ordinary waking consciousness is in a state of abeyance, may be followed reflexly by a speedy response, usually of the motor type. Such resultant action, though accompanied by all the signs of active life, is frequently independent of consciousness, or, in other words, the so-called subliminal state is entirely responsible for all the phenomena evoked. It is this sub-conscious personality which may, under certain conditions, be influenced powerfully by external influences, when any suggestions then received may be acted upon in the ordinary waking state. There have not been wanting instances in which some dominant passion or emotion has manifested itself even upon a death-bed in the performance of some accustomed act, or the rehearsal of some imaginary scene familiar to the dying person. It is said of Mr. S. Coleridge-Taylor, the composer, who died the other day of pneumonia, that shortly before his death, while still unconscious, he sat up in bed and conducted perfectly the whole of a new work as if before an orchestra, with great vigour, which strange procedure lasted for twenty-five minutes. Even *in articulo mortis* we see the triumph of mind over matter, and the equality, or even superiority, of the subliminal as compared with the everyday consciousness.

LEADING ARTICLES.

PUBLIC HEALTH IN CANADA.

Elsewhere in our columns will be found an account of the recent meeting of the Canadian Public Health Association in Toronto. There is a peculiar interest attached to the Dominion at the present time, for it has become the centre of attraction for a large and increasing number of immigrants from the United Kingdom as well as from other countries. The sudden increase of population thus entailed has naturally added not a little to the anxieties of those responsible for the public health administration of a vast territory which, in its existing stage of development, presents the problems inseparable from the conditions of a comparatively young community. One of the difficulties is the prevalence of enteric fever owing to the pollution of water supplies. In the course of time this particular disease will no doubt gradually disappear, but in this connection it may be well to remember that even in the United Kingdom enteric fever is still one of the fatal zymotics, although for many years past it has been steadily diminishing. It is to be hoped that with the rapid growth of big cities by the sides of her magnificent lakes, Canada will not be foolish enough to follow the example of American cities, built under similar circumstances, which discharge their sewage into the very lakes from which they draw their drinking water supplies, and are decimated with enteric fever. In Canada that essentially filth disease flourishes both in town and country, and in the latter it adds not a little to the anxieties of those in authority. For in spite of its continental dimensions the problems of crowded town life to be met with therein are no less acute than those of the great cities of Europe. The direct cause of this undesirable development is the large influx of European emigrants from various countries, but chiefly from those of the South and from Italy. With regard to the latter it is notorious that they come from countries whose standards of sanitation, both public and private, are in a lamentably backward condition. There is some reason to hope, however, that they will sooner or later share the general interest in health matters evidenced by the large attendance of all classes of society at the recent meetings of the association. One of the most significant features of that gathering was the great interest shown in the influence of industrialism upon the general welfare of the community. The matter was dealt with in an able paper by Dr. P. H. Bryce, Superintendent of Immigration, under the title, "Shall Canada Save Her People from the Physical and Mental Degeneration Due to Industrialism?" The Dominion is undergoing so rapid an expansion that the subject must inevitably become one of daily increasing importance. It is complicated by a great variety of considerations. For instance, the cost of living is a point that closely affects the well-being of the working classes as a whole. In Canada Dr. Bryce showed that the increased cost of living was 27 per cent., in the United States 29 per cent., in Germany 40 per cent., and in Great Britain 5 per cent. for the year. He asked how long a country, essentially a producer of raw materials by virtue of geographical location and extent of territory still largely undeveloped, could continue normally to develop and prosper when it has shown a displacement of rural population during the past ten years never witnessed before in the history of any people, and an increase of urban population rapid even beyond the palmiest days of United States immigration. The conditions thus described must exercise a profound influence upon the economic future of Canada, and upon the maintenance of a sound national physique, which must sooner or later determine the survival or otherwise of every nation in the great struggle for existence which is part and parcel of the conditions imposed upon the highest phases of life upon the earth. In more than one respect Canada has an advantage over the mother country, which has been forced by dint of many centuries of hard experience to work out her own salvation in sanitary matters. The Dominion steps into a splendid scientific heritage, and can appeal to the accumulated knowledge of the Old World for guidance in many a tangled problem. Then, again, the Canadians are gifted with the ardour and high ideals inseparable from a community which is awakening to a sense of its vast potentialities. Lastly, one of the most gratifying features of the situation is the general response shown by Canadians of all sorts and conditions to the invitation to interest themselves in matters of public health. The old saying that legislation can never advance far beyond popular enlightenment applies with special force to a country distinguished by the sturdy independence of her citizens. In this respect it may be said that Canada is fully abreast of the United Kingdom, where only of late years has an intelligent and active interest been shown by the proletariat in practical matters affecting the public health.

THE *DAILY NEWS* AGAIN.

On various occasions since the passing of the Insurance Act we have had occasion to comment upon the hostile tone adopted by the *Daily News* with regard to the medical profession. The journal in question is commonly believed to be a sort of semi-official organ of the Liberal government, and, therefore, to be more or less behind the scenes. If its general rancour against medical men is even a faint reflection of the official attitude it would afford a key to much recent history. In its issue of the 14th instant, it has a leaderette devoted to the triumph of the Insurance Act, which winds up by a comment upon the one serious difficulty yet to be solved. "The present position," it says, "with regard to the doctors is one with which we ought not to be faced at this late stage." That is the point we have been urging for the past eighteen months. Mr. Lloyd George should have begun with the doctors, instead of at first ignoring them, then dealing with a handful of nominal leaders, and finally putting off settlement until the eleventh hour. If the *Daily News* has a bone to pick with anyone it should be with the Chancellor of the Exchequer and not with a flouted profession. The original scheme, wails the *Daily News*, would put a million of money into the pockets of medical men, but it does not add how much it would have extracted by diverting many millions of private into contract patients. The increase to 7s. 6d., it moans, would mean a million more. Then with gathering force the editor exclaims, "The nation will not tolerate this policy of blackmail." It is a pity that the law of libel does not cover a dastardly insult of this kind levelled at a noble profession, which is poor in pocket as it is high in ideals. "The State has placed the doctors in a privileged position," remarks this indignant Solon, "but they must not be permitted to use that privilege in order to exact grossly unjust terms which will have to come out of the pockets of the people." It is news to us that the man in the street carries terms in his pockets, but apart from the mere hysterics of a political editor who feels that the ground is being cut away from under his feet we fancy there must be more strictly personal incentives at work to explain this sustained bitterness of the *Daily News* against the medical profession. Can it be that he prefers the medical services of unqualified persons who advertise at length in his columns. If a tithe of the claims, say, of Sandow and of Macaura could be believed, what need is there of State-qualified medical practitioners? There is just this little difference between the qualified and the unqualified. The *Daily News* grudges the sum of seven shillings and sixpence to a qualified medical man for attending an insured person at all times and all seasons, and for devoting to him the full measure of a long and costly education and experience. The unqualified Sandows and Macauras have no need of half-crowns from the State, they play for higher game and succeed so well that they are able to spend scores of thousands of pounds in mere advertisement. What has the *Daily News* to say to this aspect of the matter? Possibly that journal, in the manner familiar to that baser journalism which lives in an odour of sham philanthropy, will decline to defend where it has not hesitated to assail. We wonder how many lives have been ruined and destroyed by the agency of questionable advertisements published in the columns of this self-appointed censor of the medical profession?

CURRENT TOPICS.

The Health of Tinplate Workers.

According to the report recently issued by the Medical Inspector of Factories on the conditions of employment in the manufacture of tinplate, the mortality of the workers in the trade as a whole, between the ages of 35 and 45, is below the standard for occupied and retired males, but at every other age it is excessive, being 4 per cent. above the average. The principal diseases from which these operatives suffer are cancer, phthisis, and diseases of the nervous, respiratory and urinary systems. The work itself exposes those who labour to dust and to fumes. Rheumatic affections appear to be prevalent among many of the tin-house workers. The report, which is made by Dr. Collis and Mr. Hilditch, refers to the lamentable recklessness which is too often displayed in replacing fencing of machinery that has been temporarily removed, which is still responsible for a considerable number of accidents. The inspectors are of opinion that the precautions necessary for the safety and health of the operatives, might with advantage be discussed in a conference with the employers and workmen. This should lead to a higher standard, especially in new installations; but certain requirements, they say, should be made binding by regulations. These regulations provide, amongst other things, that tinning shall not be done except in connection with an efficient exhaust draught; cleaning and dusting shall not be done except under such conditions as to prevent, as far as possible, the escape of dust into the air of any place where work is carried on.

Care of the Feeble-Minded.

When we compare the conditions under which our labouring classes live and from which only the most robust rise, with some of the elaborate and expensive retreats provided for the insane, we feel inclined to become despondent. The unfit are fed and clothed, in practical comfort, while the poor and physically strong sink into the mire. Such a view would, however, be founded on a very superficial aspect of the situation. The primary reason for well equipped asylums is simple humanity, but no less important is the secondary reason, for scientific care of the feeble-minded, and particularly investigation of the causes at work in the production of insanity. Without the study of disease we cannot grapple with its cause, nor bring about its cure. We must acknowledge that our methods in this country are directed principally to keeping insane patients comfortable, and that there is a large mass of material on which accurate scientific work might be based, but which lies unstudied in our workhouses and asylums all over the country. We might follow with advantage the example of America and establish psychopathic hospitals, of which the main object is the observation of early cases of insanity. That established in Massachusetts, under Dr. Southard, promises to do work on lines which have not been followed hitherto. This hospital has only been in operation for about three months, but already numerous patients submit themselves to observation, and so make it possible to treat mental disease early. There is also a system which ought to be more widely adopted of tracing backwards the family histories of patients in order to arrive at some cause or premonitory symptom of mental aberration.

The Value of "Freibanks" in Populous Centres.

Every medical officer of health and sanitary inspector is aware of the waste of good, edible meat that sometimes occurs when the carcases of animals affected with localised forms of tuberculosis are destroyed. An interesting and instructive paper was read by Mr. Daniel Hamilton, F.R.C.V.S., at the recent congress of the Incorporated Sanitary Association of Scotland at Montrose, on the advisability of establishing "Freibanks" in populous centres. The "freibank" (*i.e.*, isolated shop) has been proved to be not only a food saver, but a popular institution, and it, or a similar centre, has been in existence in Germany since the thirteenth century, when the town of Augsburg issued regulations prescribing that no butcher who shall slaughter a measly animal shall sell the flesh of such animal to anyone without declaring its condition, and that such meat must not be sold at the ordinary meat booths, but at a separate one situated some distance from the other booths. The "freibank" is, therefore, only for the sale of the flesh of animals which is found to be of an inferior quality or affected with some disease, and is sold either raw or sterilised as the veterinary inspector might direct. The majority of the Continental countries have a universal standard for the inspection of meat, and stringent regulations are issued instructing the inspectors how to deal with healthy or diseased meat under its many different forms and conditions. A "Freibank" is erected and conducted by the local authority. It is usually near, or situated within, the municipal slaughter-house, and is under the direct control of the official veterinary surgeon, the work of dividing, weighing, and selling the meat being discharged by a member of the slaughter-house staff. Economic, as well as hygienic, considerations seem to point to the advisability of giving the system a trial in this country.

An Old Fee Book.

A recent number of *The New York Medical Journal* gives some interesting extracts from the Fee Book of an Irish physician of the seventeenth century. Two pounds—paid in advance—was the fee in a case of gonorrhœa. "For escaping a putrid sore throat," one Meroney was mulcted in eight shillings. With pardonable pride Dr. Thomas Arthur relates how a *post mortem* examination proved his diagnosis accurate in the case of a woman fifty years old, and nineteen married, whom his "seniors in medicine" killed with hydragogues for an alleged ascites in the eighth month of her pregnancy. "For this I obtained," says he, "not a little praise." The nomenclature is sometimes a little puzzling—blindness due to suffusion, torrid bile causing a stomachic cardialgia, an hysterical hydrops, a scirrhus of the liver from metastasis of the monthlies, and a fisherman, caught by an anchor, were all cases treated by him, for the most part with success. His annual income fluctuated about the region of £70 till 1627, when he reached £105, after attending and curing Archbishop Ussher. He did better from this on, and in 1632 nearly reached £300. Altogether, when fully established, he must have earned an income worth, in spending power, about £1,000 a year at the present day. On the whole, conditions approximated fairly closely to those of country practices of the present day. The worthy doctor had a distinct scale of fees, according to the standing of the patient, and the time and trouble he had to give to the case.

Therapeutic Advance.

Every day the physician's attention is systematically and insistently called to the advantages of some or other new pharmacological product. He is overwhelmed by advertisements of synthetic and extractive preparations that herald with polysyllabic vagueness the final victory over all or some of the ills that are our heritage. There are many skilled and earnest workers in laboratories who give their best to the construction and examination of new remedies. Their tests are very thorough, and physical and physiological properties are worked out to something approaching finality. In fact, every side but the clinical receives the chemist's best attention, and while the effects of divers drugs are beautifully illustrated by diagrams showing all the results of intravenous injection, we may be led into analogies that are entirely false, since in practice there are very few remedies that are so given; the effects when given by the mouth may not be what we expect. For example, digitalis, which causes a rise in blood pressure when given intravenously to an animal, has recently been proved to have no such effect when administered by mouth to man. Adrenal extracts by the mouth leave blood pressure unchanged, but intramuscularly cause a marked rise in the human subject. A clinical scheme of observation would be invaluable. Of course, such a scheme would be much slower in its results than the present laboratory methods, and would need men who could impersonally subtract extraneous matter from their results and give the drug no more and no less credit than its due. The facts, when collected in sufficient numbers at the bedside and collated, would give us a much firmer therapeutic base to work on than we have at present. The effects of some few drugs—*e.g.*, digitalis—could be examined almost without apparatus by any practitioner, but most will require long and careful observation in hospital wards, where the utmost accuracy in examination and record will give us conclusions on which we need never hesitate to act and which would clear up the tangle of ephemeral panaceas through which we are now trying to struggle.

The Irish Local Government Board and Domiciliary Treatment.

An important question has arisen in Dublin as to the powers of insurance committees in administering the sanatorium benefit. For the past few months the Dublin County Borough Insurance Committee has been in the habit in the case of patients undergoing domiciliary treatment, of making arrangements for the supply, where necessary, of additional food, clothing, bedding, and accommodation. All treatment provided under the sanatorium benefit must be approved by the Local Government Board, and must be to the satisfaction of the Insurance Commissioners. The Commissioners expressed some doubt as to the wisdom of the course adopted by the Insurance Committee, but avoided giving a definite decision. The Local Government Board, however, after a long delay, communicated to the Insurance Committee their decision that the treatment in question did not come within Section 16 (i.) (b) of the National Insurance Act. A deputation from the Committee waited upon the Board last week, and urged very strongly that the attempt to treat patients for tuberculosis without the power to supply food and clothing, where necessary, would be futile. A prolonged discussion took place, and the Board promised to reconsider the matter. We hope that as much discretion as possible will be left to individual committees, and that they may not be hampered by an unduly restricted outlook, in the administration of the benefit. It is probable that the Local Government Boards of the three countries will act in unison, and it is, therefore, important that professional opinion should make itself felt.

PERSONAL.

Dr. A. E. Carver, M.B., B.C.Cantab., has been appointed Tuberculosis Officer to the Birmingham General Dispensary.

Dr. Frederic C. Dodsworth is about to retire from the post of Medical Officer of Health of Chiswick, which he has held since 1878.

Mr. R. C. Elmslie, F.R.C.S., has been appointed Surgeon in Charge of the Orthopædic Department at St. Bartholomew's Hospital.

Dr. Hugh Walsham, M.D., F.R.C.P., has been appointed Medical Officer in Charge of the X-ray Department at St. Bartholomew's Hospital.

Dr. H. A. Powell has been appointed a member of the Consultative Committee of the Board of Education by the President thereof for a term of six years from October 1, 1912.

Dr. Henry MacCormac, M.B.Edin., M.R.C.P., has been appointed to the newly created office of Assistant Physician to the Department for Diseases of the Skin at the Middlesex Hospital.

Dr. E. P. Cumberbatch, M.A., M.B., B.Ch., M.R.C.P., has been appointed Medical Officer in Charge of the Electrical Department at St. Bartholomew's Hospital.

Among the women candidates for the forthcoming Metropolitan Borough Council elections are the names of Dr. Ethel Bentham (Lab.), Kensington, and Dr. Adeline Roberts (M.), St. Marylebone.

Dr. Archibald Donald, M.D., M.R.C.S., has been appointed to the Chair in Obstetrics and Gynæcology in the University of Manchester, vacant through the death of Professor Sir William Sinclair.

Dr. C. W. Saleeby, F.R.S.E., delivered an interesting address on "Alcohol and the Insurance of the Race," at the opening of the Western Temperance League Conference at Bristol last week.

Sir Thos. B. Crosby, M.D., Lord Mayor of London, will give a dinner at the Mansion House on Friday, November 1, to meet the Presidents of the Royal Colleges of Physicians and Surgeons.

A portrait of Sir Henry Holland, Bart., M.D., F.R.S. (1788-1873), by Thomas Brigstocke, is among those recently acquired by the Trustees of the National Portrait Gallery, where it is now on exhibition.

Dr. Stenhouse Williams has been recommended by the Health Committee of the Liverpool City Council for the appointment of Deputy City Bacteriologist and Analyst under the Sale of Food and Drugs Act.

Sir William Leishman, F.R.S., will introduce a discussion on the ætiology of blackwater fever at the first meeting of the Society of Tropical Medicine and [illegible], to be held on Friday next, at 8.30 [illegible]

Mr. J. [illegible] has been appointed Assistant Surgeon to the Children's Department at the Ulster Hospital for Children and Women, and Assistant to the Professor of Surgery at the Queen's University, Belfast.

Dr. Alexis Currel, of the Rockefeller Institute of New York, has been awarded the Nobel Prize for Medicine for 1912 for his work on the suture of vessels and the transplatation of organs. The value of the prize this year amounts to about £7,800.

Professor Lorrain Smith, the newly appointed Professor of Pathology in Edinburgh University, delivered his inaugural address on Wednesday before a large gathering, choosing for his text "The Essential Unity of Pathology and Medicine." Our Edinburgh correspondent gives a *résumé* of the address in another column.

In recognition of his long and valuable public and professional services in Chirnside during 36 years, Dr. McVie has been the recipient of a silver loving-cup and a purse of 160 guineas. The testimonial was raised by his patients and friends, and the presentation was made on their behalf by Mr. John Gillies, Edington Mill, on the 11th inst.

Professor Dr. Nietner, of Berlin, General Secretary of the German Central Committee for the Prevention of Tuberculosis, will deliver the inaugural lecture at the Medical School of the Royal Hospital for Diseases of the Chest, City Road, E.C., on Thursday, October 17th, at 5 p.m., on "The Modern Combat against Tuberculosis amongst Children." The chair will be taken by Sir William Osler, Bart., F.R.S.

A CLINICAL LECTURE

ON

PLASTER OF PARIS IN SURGERY. (*a*)

By WALTER C. S. STEVENSON, M.D., B.Ch., D.P.H.,

Surgeon, Dr. Steevens' Hospital; Surgeon Incorporated Orthopaedic Hospital, Dublin.

Gentlemen,—As plaster of Paris is so constantly employed in orthopædic surgery, and in surgery of the bones in general, I think it may be of service if I indicate some points to guide you in its uses and methods of application. We commonly apply it in the shape of plaster of Paris bandages. These may be purchased at prices varying from 5d. to 10d. each, but it is most satisfactory, certainly in hospital practice, to have them freshly made in hospital.

To Make Plaster of Paris Bandages.

The best bandage material to retain the plaster is crinoline, also called in the trade "checked muslin." It costs about 4¼d. a yard (30 ins. wide), and is sold by the piece. The crinoline is boiled two or three times, to get rid of the starch, and then drawn to stretch it. The selvedge is removed, and the piece is cut into strips from 1½ ins. to 5 ins. wide, and five or six yards long, according to the requirements of the case. Thus the wider bandage, 5 ins. wide, is best for an adult's spinal jacket, while a narrow one is more serviceable for an infant's foot.

In making the bandages, only the best white dental plaster should be used. It should be quite [illegible] shilling a stone, [illegible]

shillings.

The plaster bandages are made on a table. The crinoline is rolled up loosely, and about a foot of the free end placed on a bed of plaster. Some more is spread over it, and rubbed in well with the hand, so that plaster is caught in the meshes of the muslin on both sides. As the first foot length is done it is rolled up loosely, and the next foot treated, till the whole bandage is completed and rolled.

The storing of plaster bandages is most important. They should be put, with the loose plaster, in air-tight boxes, and kept in the stove room or kitchen. In damp weather they should be placed in the oven the night before use. The oven must not be so hot as to scorch the fabric, thereby destroying the bandage.

Application of Plaster Bandages.

In applying plaster, it is usually put on over a flannel bandage. A couple of years ago, Mr. Swan introduced here the use of unprepared cotton wool, which is brownish in colour. It is rolled into bandages and sterilised. This wool is much cheaper than bandaging, is pleasant against the patient's skin, and protects it from undue pressure and irregularities of the plaster. The limb is completely enveloped in the wool, particular care being taken that bony points are well padded.

The limb having been covered, and everything being in readiness, the plaster bandage is removed from the plaster box, and put, standing on its end, in a bucket of water, so that it is completely covered. As the bandage is loosely wound, the whole plaster gets thoroughly wetted in a couple of minutes, and is ready for application, as soon as the bubbling ceases. It is removed from the bucket and squeezed to get rid of the excess of water. If working single-handed, it is well to put in a second bandage, when the first is taken out of the water, so that it may be ready when the first has been applied, and so on. The bandage should be wound on to the limb rapidly, evenly, and fairly tightly, and should be well rubbed with the fingers to make the layers blend together. On this vigorous rubbing depends the durability of the plaster case. Every part should be covered by two layers at least, and the part subject to the greatest strain should have most plaster.

If the bandage is not wet enough at any part more water should be poured on with the hand, until the plaster is rubbed smooth.

The plaster case may be reinforced by incorporating oak chips or soft iron bands. One requires to be careful that the reinforcing material does not press the plaster unduly on the tissues. A little padding under the ends will prevent this. Finally, the plaster case is smoothed off with a handful of plaster, which has been dipped in water. It adds greatly to the safety and comfort of the case if, as soon as it is partly set, which good plaster ought to be in four to six minutes, it is cut down with a sharp knife, through its whole length and thickness. It is an advantage, and safer for the patient, to cut slantwise, so as to have a bevelled edge. The case will spring a little, but the broad edges can be easily kept in apposition by a muslin bandage. This also saves much time when the plaster requires removal. Otherwise the removal may be a tedious procedure. A weak solution of acetic acid, dabbed along the line to be cut, makes the work easier. Another method is to apply the plaster over a couple of strands of pianoforte wire. The wire is used as a saw when the plaster is to be taken off. If one is constantly putting on plaster, it is well to wear rubber gloves to save the hands, or at least to vaselin the hands and nails well.

A plaster case, if the plaster is good, will set firmly in five minutes, and be fairly dry in a couple of hours. It is not, however, thoroughly dry for a day. If it has to be worn for a considerable time it should be sized or painted when dry. A fairly strong watery solution of silicate of soda or water glass, commonly used for preserving eggs, if painted on, will give the case a glossy appearance, make it fairly waterproof, keep it from chipping, and prevent the plaster rubbing off on to the clothes.

I propose now to deal briefly with the uses of plaster of Paris in certain surgical conditions.

Fractures.—The routine use of primary plaster treatment for fractures of the limbs is on the whole most satisfactory. By the use of judicious cotton wool padding, and the practice of cutting down the plaster case when set, the danger of swelling strangulating the blood supply is almost negligible. In fact, the plaster case will to a large extent prevent the swelling, or if swelling has already formed will tend to reduce it, owing to the elastic recoil of the cotton wool. The case fits accurately, keeps the

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(*a*) Delivered at the Orthopædic Hospital to the Post-Graduate Class, Royal College of Surgeons, Ireland, October 10th, 1912.

limb quiet, and alleviates the patient's sufferings. Skiagrams of the limb should be taken as soon as possible through the plaster to verify the position of the parts. If this is not satisfactory the displacement can be corrected in accordance with the exact knowledge obtained by the skiagrams, and fresh plaster applied, with the patient under an anæsthetic if necessary. The plaster case can at any time be removed temporarily for massage and mobilisation of the limb.

Occasionally it is expedient in fractures of the leg to hasten the process of repair by letting the patient walk. I remember one case where X-rays showed no bony callus ten weeks after the accident, though the fragments had been wired. I incorporated a slipper and stocking in the plaster case, and allowed the patient to walk about on the injured limb with the aid of a stick. Most of the body weight was transmitted from the ground through the plaster to the tubercles of the tibia, which were tightly grasped by the case.

Dislocations.—Though plaster is usually not necessary in traumatic dislocations unless bone is involved, as in the case of a fractured coronoid in dislocation of the elbow, yet it is sometimes useful in subluxations. I cured one case of long standing traumatic displacement backwards of the head of the ulna (due to torn and stretched ligaments) by a plaster case worn for three months.

In Operations.—Plaster of Paris is in constant requisition in the operating theatre. A light application of plaster is a nice method of fixing the limbs and the dressing after an extensive removal of varicose veins. It is essential to maintain the correct position after osteotomies for rickety curvatures, etc., in orthopædic work. As we utilise a tourniquet in bone operations bleeding must be carefully guarded against. The operation wound is well padded. Pressure applied over this dressing makes a depression in the plaster case, which by keeping up the pressure effectually prevents hæmorrhage when the tourniquet is removed. After plating or wiring fractured bone, it is usually necessary to leave in a drain, and to cut a window in the plaster case. The plaster and wool frequently get soaked with blood. If, at the first dressing, the parts are dusted with boric powder, and the plaster and wool copiously sprinkled with saturated alcoholic solution of mercuric biniodide, the case will remain sweet and clean, and as no decomposition will occur, the parts need not be further disturbed. The same remarks apply to sequestrotomies, where some hæmorrhage cannot be avoided. In these cases plaster is often necessary to correct the position of the neighbouring joints and to prevent fracture of the weakened involucrum. In excision and operations on joints plaster makes the most convenient and comfortable splint.

Spinal Caries.—Plaster is used to fix the patient to a Whitman's spinal splint or to make a spinal jacket. For instance, we wish to apply a jacket to
ll marked angle in the lower
roller towelling is suspended
t three feet from the ground
ove a table (Swan's method)
the patient lies face down-
ds stretched above the head.
placed a small pad ("dinner
ubsequently removed. The
long the sides of the patient's
andages are wound round the
ock, extending from the
scapulæ, or a tight vest,
between the legs, may be used.
well padded. If the angle is
ld be padded round till the flat
of the hand pressed against it feels no prominence. The case cannot then injure the skin as it is otherwise likely to do. An assistant steadies the hips while the bandage is applied from below upwards. The first layers should be as tight as possible, but the outer ones may be looser. If this rule is not observed, the layers next the skin will become wrinkled, and the case most uncomfortable or impossible to wear. I should again emphasise the importance of thoroughly rubbing the bandages to blend the layers together. If the costo-vertebral joints are affected, it is well to splint the ribs by moulding the case against them with the finger. The jacket is also moulded over the iliac crests. The patient is then let down on to the table, above which he has been horizontally suspended. The towelling is cut away above and below the plaster, the intermediate portion being left *in situ.* The patient is wrapped in a blanket, and after a few minutes laid down in front of a fire for a couple of hours. If the case is to be a removable one, it is cut down the middle in front before it completely sets. It is sent to the instrument maker to be bound with leather, and have eyelet holes or hooks put on for lacing down the front.

Scoliosis.—The jacket is put on while the patient is in self-extension, that is, suspended by straps under the chin and occiput. The curves unfold to some extent in this way and the jacket maintains the improved position. A more complicated correcting jacket is made by padding the patient's chest with wool till the figure appears symmetrical. The plaster case is then applied with self-extension. Windows are cut in the jacket opposite the prominent ribs behind and the retreating bust in front. The deformity is corrected by transferring from time to time a little padding from the front to the back of the chest, so that pressure is exercised on the prominence, while the depressed side has room to expand.

Hips and Thighs.—For applying plaster in this region, it is convenient to use Lorenz' stand or some modification of it. The patient is supported on a box at the head and shoulders, and a spear-head-shaped sacral prop, and his perinæum is pressed against a pillar which stands vertically at the base of the spear head. After reduction by Lorenz' bloodless operation for congenital dislocation of the hip the plaster envelops the pelvis and the trunk to the ensiform cartilage, and the thigh or thighs in a double dislocation, as far as the knees. The thigh is abducted to the frontal plane and flexed at right angles to the side of the body. The plaster is well moulded behind the great trochanters, over the iliac crests and symphysis pubis to retain the head of the femur in its reduced position. The patient is removed from the stand by cutting down on the vertical pillar and slipping out the spear head. The plaster is trimmed round the perinæum. In Kocher's breeches for fracture of the shaft of the femur the plaster grasps the hip and pelvis above, and the irregularities of the knee, leg, and foot below, and, as extension is applied during the whole of its application, this is maintained when the plaster sets. For extension in *morbus coxæ,* plaster bandages are applied to the lower two-thirds of the thigh, leg, and foot, webbing, to which a stirrup is subsequently fixed, is incorporated in the plaster, so that the extending force of the weight over the pulley gets its purchase from the condyles of the femur. This arrangement has advantages over American strapping in that it does not irritate the skin, is better fixed, can be worn for a long time without being changed, and particularly does not stretch the ligaments of the knee-joint. A flail condition of that joint sometimes follows prolonged extension applied below the knee. Another advantage of the plaster of Paris extension is that eversion and inversion of the hip may be corrected by fixing the middle of a stick about eighteen inches long in the plaster. It is placed at right angles to the lower third of the leg against its posterior surface, so that when the stick is lying flat on the bed the eversion or inversion will be corrected. The correction can only be brought about gradually. In eversion of the right thigh, for instance, the end of the stick to the patient's left is raised, till the position is easy for the patient. From day to day this end is lowered until the limb can lie naturally flat on the bed.

Deformities of the Foot.—In children over three or four years of age with club foot, when the deformity is not improving satisfactorily by manual manipulations alone, the foot is wrenched with a Thomas's wrench till a valgus position is attained, and a plaster case is applied. The bandage is rolled round the foot in the direction from within outwards across the sole, so that each turn from the foot to the leg can be used as a stay to maintain the eversion of the foot. The plaster extends from the tips of the toes to below the knee. It is not necessary completely to enclose the heel. While the plaster case is setting, one hand steadies the ankle at right angles, while the other grasping the foot opposite the ball of the toes, everts and pronates it at the mid-tarsal joint, making the sole look outwards. After a week, when the soreness has disappeared, the plaster is removed and the foot again manipulated daily, and retained in a Scarpa's shoe or a night shoe.

In flat foot, after tenotomy of the peronei and wrenching, the plaster bandage is applied in the opposite direction to that used in the talipes varus. The foot is put up in an exaggerated varus position, with the sole well supinated, and the toes pointing up towards the opposite hip. The plaster is worn for six weeks, and then removed for exercise and massage of the foot, and the use of a valgus boot with an outside steel and an inside malleolar strap.

There is one point that is worth particularly noting when treating feet. The toes are very apt to be cramped together, a position very irksome to the patient and bad for the foot. This can be avoided by stuffing wool between the toes, which may be removed when the plaster has set. The toes are thus spread out, as they should be, and at the same time the plaster has good purchase on the metatarsal bones.

Plaster Casts.—Plaster of Paris is used for making casts, either as a record of a case, or for the guidance of the instrument-maker. The part to be dealt with, say a foot, is shaved and lubricated with sweet oil, so that the plaster will not stick to it. A suitable cardboard box or tray of some kind, in which the cast is to be made, is in readiness. Dry plaster is slowly stirred into a bowl of water until a fairly thick cream is formed. This is poured into the cardboard box, into which one foot is laid, only so much of the limb being embedded as will permit of its removal without breaking the mould. The upper surface of the lower half of the mould is smoothed with a knife or spatula, and allowed to set. It is then brushed over with sweet oil. The upper half of the mould is similarly made. When the plaster has set, the negative cast is separated along the oiled surface, and the foot removed. The parts of the cast are fitted and tied together, and left to dry. To make the positive cast, the inside of the mould is oiled and filled with plaster, prepared as before. When dry, the irregularities of the positive cast are trimmed off with a knife.

In conclusion, I shall summarise the advantages of the routine use of plaster of Paris. It is cheap, can be easily stored and kept in readiness for immediate requirements. It does away with the necessity of retaining in stock a number of splints of various sizes, shapes, and materials, and with the annoyance of finding, in an emergency, that the particular splint or apparatus is not to hand. A plaster splint can be made to fit accurately, to protect the injured part completely, and to alleviate the patient's suffering. It can be moulded to correct a deformity and to retain the part in a correct position. It can be applied to exert pressure, to control hæmorrhage, to diminish œdema. By cutting windows in the plaster case, it can be used to ensure continued immobility where operation wounds and sinuses are present, or for the graduated rectification of deformities. It is fairly pervious to X-rays, so that the position of the bony parts can be ascertained without disturbing them.

Plaster of Paris allows the surgeon to be more or less independent of the instrument maker, who, at the best, obtains his knowledge of the requirements of the case secondhand. Besides, it is not convenient or time saving to have an apparatus made which may be only required for a week or a fortnight, especially if it has then to be superseded by another. It is true that plaster is rather heavy, but with experience in its application the number of bandages can be diminished. It does not necessitate an elaborate *technique* or expensive reinforcing materials, as do celluloid, leather, and poroplaster. Nor is it inflammable or easily injured. Finally, plaster of Paris is an old friend of the medical profession, and, I think, it will be difficult altogether to supplant its general utility by any substance that is at present known to us.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by T. G. Moorhead, F.R.C.P.I., Visiting Physician to the Royal City of Dublin Hospital. Subject: "Two Cases of Acromegaly."*

~~ORIGINAL PAPERS.~~

SOME PRACTICAL POINTS IN THE TREATMENT OF ECZEMA. ~~(a)~~ Select

BY G. S. STOPFORD-TAYLOR, M.D., M.R.C.S., &c.

Senior Physician at the Liverpool Skin Hospital.

Gentlemen,—I am sure that you will agree with me when I say that the most attractive branch of general medicine is that of the study of cutaneous disorders, and it has always been a source of regret to me that the General Medical Council has not made a higher standard of education obligatory in this most important subject.

Various reasons may be assigned for this apparent apathy.

Firstly, because common affections of the skin are rarely fatal, and secondly, because the student of to-day is already over-burdened with work.

Reform is necessary in medical education as in many other things, and, personally, I cannot see how this is to be effected unless the curriculum is extended. Fortunately, there are post-graduate classes in most centres of medical education for those who wish to learn, and general practitioners are always welcome at any clinic, but, unfortunately, these are of little value to those who live at a distance. Still, if men are desirous of learning, the difficulties of distance can be overcome. What is to prevent a country doctor from taking his annual holiday in a hospital city, such as London, Liverpool, Manchester, Birmingham, etc., and studying not only dermatology, but ophthalmology, gynæcology, and other branches of medicine?

~~(a)~~ Inaugural lecture delivered before the New London Dermatological Society, October 10th, 1912.

Reprinted from the Med. Press

We do not pretend to say that holiday studies will make a specialist of the general practitioner, but we can train him to use his powers of observation and other senses, and so avoid making glaring errors of diagnosis as in cases of itch and ringworm.

Which of us has not seen numerous cases of the former treated for "disorders of the blood," and the latter for dandruff?

A school attendance medical officer informed me that 95 per cent. of the certificates given by the general practitioner in a large city as to the fitness of children to return to school, from which they had been excluded because of ringworm, were incorrect.

If the general practitioner wishes to hold his own in the struggle for existence, he must, in the words of His Majesty the King, "Wake up."

I believe that the successful doctor of the future is the good all-round man. He must know how to use his microscope, ophthalmoscope, laryngoscope, otoscope, and other instruments of precision, and then he need have no fear of Mr. Lloyd George. Remember that pools in corn, cotton, iron and coal, and other products of the earth may be possible, but it is impossible to make a pool in brains, and by cultivating his brains the well-trained doctor will succeed.

Consider for a moment the advantage the British doctor has over his Colonial and American cousin, who leaves his country, say, every third or fourth year for the purpose of study in Europe. Does he lose anything by so doing? No; he gains, because his patients know where he has been, and conclude that he returns home brushed up and, consequently, a better doctor than he who has stayed at home.

Dermatology concerns the diseases which affect the largest organ of the body; an organ that stands in relationship to every organ within, and yet greater ignorance exists in the profession with regard to it than in any other department of medicine. It has been said, however, and with some degree of truth that the ignorance displayed by the general practitioner is on a level with the dermatologist's knowledge of medicine. How is dermatology taught in the majority of schools? As if the skin were a dead thing, affording a home for myriads of organisms to be destroyed by germ hunters with sulphur or other germicides.

I remember well a lady who had been so treated with sulphur that she was unable to sleep, and when she complained to the dermatologist who had prescribed for her, he replied that she was suffering from "nerve storms."

This brings me to the association of dermatology with general medicine.

No man should aim at being a specialist unless he has had a long and varied experience in general medicine. He should stand in relationship to the physician and surgeon as the royal marine, who is trained to fight on both sea and land, does to the sailor and soldier.

The definition and nomenclature of skin affections appears at first sight to be somewhat complicated, but it is really not so if common sense and patience be exercised. All that is required for the successful study of cutaneous maladies is, as in other branches of medicine, a practical knowledge of anatomy, physiology, and pathology. One great charm that the study of skin diseases possesses is, that the signs and symptoms are for the most part objective, and, consequently, their clinical course can be observed throughout.

Despite this, no two authors are agreed upon the definition of the commonest inflammation of the skin, viz., eczema; and it is a reflection upon the teaching of the day that such a disease should be indefinable.

Let us take the opinions of the late Radcliffe Crocker and of Malcolm Morris, which, on reference to their text books, are antagonistic.

Malcolm Morris says that "the artificial dermatitis excited by mechanical or physical agents is identical anatomically with the eczematous process, and gives rise to lesions indistinguishable from those of eczema," but I join issue with him here when he says, "but it is not eczema."

I would like to ask Morris the following questions: First, did he ever see an outbreak of eczema of the face, forearms, and genitals suddenly occur whilst a patient was suffering from varicose eczema of the leg? Or did he ever see a dermatitis caused by a scald on the legs, an injury complicated by an outbreak of eczema, on parts far distant from the original injury? And such attacks proving most intractable to treatment, and in some cases, recurring at intervals for years, long after the injury had healed. I venture to say that such cases are to be found in London as they are in Liverpool, if only looked for. Are they not cause and effect?

Morris's position is this. Briefly, eczema, arising from an invisible cause, according to Morris, is the only true or *idiopathic* eczema. (The italics are my own.) Now traumata are a common cause of dermatitis admitted by him to be indistinguishable from eczema. Therefore, his argument, followed out to its logical conclusion, is untenable, because it may arise from a microscopical wound or one so small as to be overlooked.

Crocker's position, on the other hand, I regard as more easily maintained. He says, "I believe it is more logical and practical not to draw such arbitrary distinctions, and to consider all cases as eczema which correspond in their morphology and general behaviour irrespective of the cause being tangible or intangible, external or internal."

I have found the best working definition of eczema to be a catarrh of the skin which arises in response either to an external cause, or in consequence of some unknown or constitutional dyscrasia.

I am firmly convinced that a large proportion of cases of eczema originate from wounds, and in the past few months I have notes of typical outbreaks of eczema following a wound of the thumb due to a cut from a knife used for slicing tobacco; a burn on the wrist caused by some boiling fat, and an injury of the sole of the foot produced by a badly fitting shoe. In each of these cases the attack of eczema which followed was clinically indistinguishable from ordinary eczema, and I cannot see any reason, except a foolish desire to make confusion worse confounded, why these cases should be excluded from the category of eczema, and relegated into that of dermatitis. It is absurdities of this kind which bring dermatology into unmerited disrepute; and in our work as clinical teachers we should set our faces sternly against their further propagation.

From whatever cause arising, an eczema, once started, rapidly becomes septic, as the skin teems with micro-organisms, and as soon as the protective layer of the epidermis is destroyed, or damaged and loosened by the inflammatory process, the products of sepsis are readily absorbed by the exposed corium, and we get outbreaks of eczema occurring at a distance from the original lesion.

In the *British Medical Journal* of September, 1897, I published a series of cases of skin eruptions of various types arising in patients already suffering from infected wounds. It has been one of my hobbies to collect the records of cases illustrating this point, and I should like briefly to quote a few of them here.

Case 1. A young lady, suffering from a moist occupation eczema of the hand, while under treatment suddenly developed an acute erythematous eczema of the face.

Case 2. A man applied several plasters to his left shin. Three days after the application of the second plaster there was an outbreak of typical eczema on the face and genitals.

Case 3. A woman sustained an injury on the back of the right arm. A fortnight before she came to hospital, the sore had dried up, and presented a scaly appearance. A doctor painted it with linimentum iodi under the impression that it was a ringworm. She was advised to repeat the application for three successive days. On attending at hospital the wound was found to be septic; the face was covered with an impetiginous eczema, and the shoulders, breasts, trunk, buttocks, and legs were covered with vesico-pustules. There was a space over the dorsal vertebræ free from disease.

Case 4. A woman rubbed some liniment on her left arm for rheumatism. The liniment produced a blister. As this was healing there was a sudden outbreak of a symmetrical papular eruption along the front of both thighs and legs.

Case 5. A young woman, while suffering from an impetiginous eruption of the scalp, developed a papulo-vesicular eczema on the outer surface of both arms.

Case 6. A man, suffering from an eczematous eruption over the right knee joint, applied starch and boracic poultices at the suggestion of a friend. Unfortunately, he was not careful to cover the poultice completely with gutta percha tissue, so it became very dry and adhered to the skin. In forcibly removing it he did further damage to an already inflamed skin, and the following day he had a typical outbreak of papulo-vesicular eczema on the forearms, sides of neck and face.

Such cases might be multiplied indefinitely, and I am confident that if you will ransack your memories you will all be able to recall similar occurrences in your own practices. I do not know in what terms modern pathology would describe or explain these phenomena, but I am of opinion that our forefathers had more than an inkling of the truth, when they spoke of a humoral and neural pathology, and I consider that these cases can be explained by the assumption that we have to do with an absorption of morbid products into the blood or lymph stream, and the determination ot an outbreak at some other part of the body through the influence of the nervous system. That the nervous system is a factor in the localisation of these secondary outbreaks is, I think, proved by the constancy with which the secondary eruption is symmetrical in distribution; and by the fact that clinical experience enables us to foretell the site at which these secondary rashes are likely to occur.

There is a certain attractiveness about these speculations, but I am essentially a practical man, and with your kind permission I propose to devote the remainder of this lecture to a consideration of some of the principles to be followed in the treatment of skin affections.

REST. One of the most instructive and inspiring books I ever read was Hilton on "Rest and Pain," and I would enter a most urgent plea for the observance of the elementary principle of rest for inflamed skins. For a generalised inflammation of the skin absolute rest in bed is a first essential for successful treatment. But even when the inflammatory condition is a local one, rest for the inflamed part is a necessity. Take, for example, an ordinary outbreak of eczema on such exposed parts of the body as the face, the hands, or other parts that have been exposed to the friction of clothing or other sources of irritation. The hands and face are continually being irritated by the atmosphere; the unrestrained play of the facial muscles keeps the skin of the face in a perpetual state of movement, while coarse and unsuitable clothing, in contact with an inflamed skin, gives it as little rest as a foreign body does to the ocular conjuctiva. Such eczemas will rapidly get well if the skin is protected from irritation by a suitable simple dressing. The movements of the skin of the face can be to some extent controlled, and its inflamed surface protected by means of a dressing and mask, the preparation of which I shall shortly describe to you.

I am a strong advocate for the dressing of skin affections by nurses specially trained in the work who carry out certain intructions. I am convinced that success in treatment is achieved by this means more rapidly than by the haphazard distribution to patients of pots of ointment or bottles of lotion, and in my clinic at the Liverpool Skin Hospital several hundred dressings are applied each week.

Let us take, for example, a case of acute moist eczema. In the first place, all morbid products are removed with boric, carbolic, bichloride, or cyllin lotions or baths, and this is followed up by the application of boric and starch poultices. These poultices, which consist of boric acid 1 part and starch 7 parts, are used in all cases to remove crusts and clean up septic surfaces. They are clean, cool, and antiphlogistic applications, and are often beneficial when ointments are contraindicated. To painful varicose ulcers they are very comforting, and often healing.

In dealing with most cases of acute eczema, a time comes when starch and boric poultices must give way to other remedies. It is impossible to lay down any hard and fast rule for one's guidance as to when to make the change. This knowledge can only come from experience; but I think that these poultices may often be continued with advantage for a considerable period when they are used in conjunction with a dusting powder. The dusting powder I specially favour is dermatol, which, as you know, is the subgallate of bismuth. When dusted on a moist surface, all drying powders have the same defect, viz., they form crusts under which sero-pus accumulates. In order to obviate this, poultices are applied as well; and we get a combination of mutual advantages, the dermatol acting as a drying agent, the poultices preventing it adhering too intimately and damming up secretion; while the film of dermatol protects the skin from becoming too macerated by the poultices.

This method of combining a powder and poultice is an excellent manner of treating coccogenic folliculitis. When I judge that the time has come to change from poultices to ointments or pastes, the procedure is as follows. And here, I may say, that I consider as much depends upon the method in which the remedy is applied as upon the remedy itself; and the dressing I am about to describe has been gradually evolved after much practical experiment:—

A piece of ordinary lint, cut to the shape and size of the part to be dressed, is soaked in cold water, wrung out, still leaving a fair proportion of moisture, and laid flat upon a table. The ointment or paste to be used is then spread thinly and evenly with a spatula on the smooth side of the lint. As the lint is wet, it does not absorb much of the grease, and being wet it keeps cool and prevents the grease melting with the heat of the body, and finding the path of least resistance, viz., outwardly. Pastes and ointments after being spread, are always faced with butter-muslin, and this is of the greatest importance. I sometimes say to my students and colleagues that any fool can spread a paste on the skin, but it takes a wise man to remove it without damaging the delicate, newly-formed epidermis.

But the muslin face enables one to peel off the dressing like a banana-skin, and prevents too much of the paste adhering to the integument. Further, it facilitates surface drainage. In virtue of the water they contain, these dressings keep cool for several hours, and as the paste contains starch this tends to set in a slight degree, and thus the dressing acts as a splint, and helps to keep the inflamed part at rest. This form of dressing, while applicable to all parts of the body, is particularly useful when applied to the face, where it is kept in place by specially knitted nets.

The pastes which I find give the best results are, Lassar's paste, boric paste, or a paste containing from 5-10 per cent. of sulphur.

Under such a dressing as I have described, a case of acute eczema progresses rapidly to a cure, and though the dressings are somewhat more expensive than simply giving a box of ointment to the patient for faulty application at home, the extra expense is well compensated for by seeing the satisfactory results of treatment. It is unwise to give up the application of this dressing too soon. One may, as an adjuvant to the ingredients of the paste, paint the skin, before the dressing is applied, with a 2 per cent. solution of ichthyol in water. This helps to brace up the blood-vessels. Before the dressing is finally abandoned one may, with advantage, intermit its application, leaving the skin exposed, except for a thin smear of paste, or coating of lotion, during the day, and covering it up at night with the complete dressing as before.

You are all sufficiently acquainted with the innate and rebellious tendency of eczema to relapse; indeed I think we may safely say that no case of eczema ever proceeds uninterruptedly to a cure. We know how the cutting of a tooth, or the onset of menstruation will determine a recrudescence, and if the dressing is suspended too soon, and the irritating effects of the atmosphere or other noxious influence allowed to operate again too early, we have a recrudescence. When it has been found that the dressing may safely be stopped, the skin should be protected either by the application of a little calamine lotion, or ichthyol, 2 per cent. in linimentum calcis, or by smearing on a little paste. One is chary about allowing a patient who has had an acute eczema of the face to resume washing with soap and water, as the dilute solution of caustic alkali, which even the best soaps form, is very prejudicial to the skin, and may precipitate a relapse.

But there are types of eczema in which washing, even with strongly alkaline soaps, is of advantage. This was long ago pointed out by Hebra. I recently had under my care a very rebellious case of eczema of the scalp in a little girl. I succeeded in getting it well on several occasions, but it invariably relapsed, and the relapses were characterised by the copious out-pouring of foul-smelling sero-pus. Not even bichloride compresses sufficed to control the discharge, and destroy the odour, but the following combination rapidly cleaned up the scalp and effected a cure:—

I had the head rubbed all over with an ointment consisting of equal parts of unguentum sulphuris and sapo mollis; a few minutes afterwards it was thoroughly washed with spiritus saponis kalinus, and it was then dressed with a sulphur paste as already described. The result was most gratifying, the odour and discharge speedily cleared up, and the child's scalp is now well. I am inclined to think that sulphur is more potent for the destruction of some forms of micro-organisms which infest the skin than even bichloride of mercury. I have carried out the same method of treatment in other forms of eczema of a chronic nature, with discharge, and have been equally well pleased with the results. In one case especially, that of an old man with several obstinate patches of eczema over the shin bone, this combination of treatments acted like a charm.

In acute eczema, as you have seen, the line of treatment I would advocate is that of rest and soothing applications. But chronic eczema requires a different course of procedure. For the sclerosed and thickened patch of eczema to which our forefathers used to apply liquor epispasticus, I have found that there is nothing like solid carbon dioxide snow. I shall quote two cases to illustrate the point.

A middle-aged lady had a persistent verrucose and lichenified eczema of the back of the right hand. It had resisted all the remedies which had been tried, ung. picis liquidum, ung. hydrarg. nitratis dilutum, and salicylic plaster among others, but it yielded to four applications of solid CO_2, and the resulting skin was soft, smooth, and pliable. Another lady had two chronic patches of psoriasiform eczema over the knee-caps, which were intensely pruriginous. The pruritus disappeared, and the sclerosed tissues melted down after two applications of CO_2 of a minute's duration each. In patches of eczema which have undergone lichenification, you will find CO_2 invaluable alike for subduing the itching and bringing about the resolution of the patch.

It has this specially to commend it, viz., it is infinitely cheaper and more easily procurable than radium, which was recently extolled so highly for this purpose by an eminent dermatologist. It is not always necessary to make a prolonged application of CO_2.

Sometimes merely rubbing the patch over for 10-20 seconds with the cone of snow will suffice; but in this you must be guided by the individual case.

Dermatology was practically an unstudied department of medicine when the first edition of the "British Pharmacopœia" was issued, and in subsequent editions I do not consider that much has been done to elaborate suitable formulæ for the treatment of skin diseases. As a result, dermatologists have had to work out their own. I am an advocate of simplicity in pharmacy. I do not consider anything is to be gained by the poly-pharmacy to which some dermatologists are addicted. To me it savours of drawing the bow at a venture, and shooting in the dark. I ask only for simple remedies; but I stipulate that they shall be properly applied.

There is one ointment in the "British Pharmacopœia" which I have found very valuable, and which I do not think is as generally used as it ought to be. I refer to the Unguentum resinæ. Combined with sulphur it is an excellent remedy for use in cases of chronic scaling eczema between the toes; and combined with unguentum hydrarg. it is very valuable as an application to ulcers, and to thickened patches of skin that require stimulating treatment. It is a tenacious and adhesive ointment, which I would venture to recommend to those of you who are not acquainted with it.

In bringing my remarks to a close I would thank you for the honour you have done me in inviting me to open your session. I trust that the session before us will be productive of much good work, and that many interesting cases will be shown at the meetings. Such a Society as this is of great educational value, for, after all, we are all students still, and in dermatology there are yet vast fields of knowledge to be explored. To me it has been a matter of great regret that those who claim to be in the forefront in the dermatological world have so often obstructed progress by "darkening counsel with words," by absurdities of nomenclature, and by an assumption of superiority and exclusiveness to which they have no title. Let us never forget that, as Newton said of himself, we are only children playing on the beach, and picking up here a pebble and there a pebble, while the great unfathomable ocean of knowledge rolls before us.

THE CLINICAL IMPORTANCE AND SIGNIFICANCE OF ACIDOSIS IN DIABETES.

By H. Montlaur, M.D.,
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[Specially Reported for this Journal.]

The pathogenesis of diabetic coma is assuredly one of the most interesting problems in general pathology at present before the profession. As, however, our knowledge of the subject is added to and experimental research throws more light on obscure points, the subject unfortunately appears to become more complicated than ever. Nevertheless, it now appears to be clearly established that the cause of diabetic coma is to be sought in acid intoxication, or acidosis, although in truth we are still ignorant as to the exact share in its production that belongs to beta-oxybutyric acid and to the other products engendered thereby—*viz.*, acetone and acetylacetic acid. These acetonic bodies which, in the diabetic, escape complete combustion, and their ultimate transformation into water and carbonic acid, are eliminated *viá* the urine, and thus diminish the alkalinity of the blood. The presence of these acetonic products or generators of acetone, however, are held by certain observers not to explain all the features of diabetic coma, an opinion which, *inter alia*, is shared by Lépine and Morel. According to Lépine, the pathogenesis of diabetic coma is not wholly attributable to acid intoxication or acidosis; he believes that the intoxication is more complex than this, deriving both from beta-oxybutyric acid and other concomitant toxins. Hugounenq and Morel, on the other hand, in view of the fact that the reduction of the alkalinity of the blood due to the acidosis does not account for the production of coma, hold that the substances which tend to enhance the toxicity of the acetonic bodies belong to the quaternary derivatives of albumen. They call attention to the fact that in the diabetic subject the disassimilation of nitrogenous substances is, as a rule, exaggerated, and it may be conceded, they urge, that in this disease there is a disturbance of the general nutrition which bears not only on carbohydrates, but also on nitrogenous substances. They believe that the solution of the problem lies in the products of disintegration of the molecule of albumen (the peptides), which are eliminated by the urine as part of the unestimated "organic residues." These peptides may be produced in unduly large quantities, or they may fail to undergo destruction, or it may be that, produced only in normal quantities, they are the outcome of an abnormal process of elaboration. We may add that Hugounenq and Morel are not concerned to dispute the importance of acidosis in the pathogenesis of diabetic coma, for this is a factor which it is impossible to overlook, especially as the treatment by bicarbonate of soda given by intravenous injection, though not uniformly successful, does often notably improve matters in diabetic coma.

Marcel Labbé and Louis Violle, who have investigated the comatigenous properties of various organic acids, arrived at the conclusion that acidosis is truly the principal cause of diabetic coma, and they showed that organic acids possess a specific toxicity apart from the toxicity incidental to their acid nature; in fact, the importance of these two kinds of toxicity is in relationship to their chemical constitution. The acid toxicity is always more pronounced than the specific toxicity and the toxicity of beta-oxybutyric acid which, according to these observers, plays the most important part in the production of diabetic coma, the acid toxicity stands for three-quarters of the total toxicity. Consequently, Labbé and Violle regard intensive alkalinisation of the organism as the basis of the treatment of diabetic coma. They hold, and so does Lépine, that it is of primary importance from the therapeutical point of view to recognise threatening acidosis in view of the oft-repeated observation that the alkaline treatment is often of no avail once the coma has actually supervened.

The most important element in the diagnosis of acidosis is the estimation of the urinary ammonia. The excretion of this compound is exaggerated in the diabetic who are called upon to combat acid intoxication and the reduction of the alkalinity of the blood. Under ordinary circumstances an individual on a mixed diet in the course of twenty-four hours eliminates in the urine from four to one gramme of ammonia, representing, on an average, from five or six per cent. of the total nitrogen. The presence of two or three grammes of ammonia is already an indication of a certain degree of acidosis, according to Labbé, and in presence of an intoxication culminating in coma we may get six to eight grammes, indeed Stadelmann mentions a case in which no less than twelve grammes of ammonia was excreted in the twenty-four hours.

Among other signs of acidosis obtained by urinary analysis, one of the most important is the amount of beta-oxybutyric acid which gives rise to acetylacetic acid and acetone. The quantitative estimation of this acid unquestionably affords most valuable information as to the amount of acetonic products in the urine, but its application is difficult except in a research laboratory, and in practice it is not often available.

Magnus-Levy, it is true, has described a means of approximately ascertaining the amount of beta-oxybutyric acid on the basis of the amount of preformed ammonia in the urine. All we have to do is to multiply the weight of the ammonia by 6.12, in other words this observer finds that all the preformed ammonia is saturated by beta-oxybutyric acid. Certain it is that ammonuria in the diabetic stands in direct relationship with the excreted beta-oxybutyric acid, but other acid compounds are also saturated by this alkali, so that after all Magnus-Levy's process is only approximative.

From the clinical and eminently practical point of view, it is better to estimate the intensity of the acidosis by the colorimetric test, easy enough to apply, of diacetic acid, sometimes called acetylacetic acid, an intermediate compound between beta-oxybutyric acid and acetone. This diacetic acid is present in the urine as a very unstable acetylacetic ether. Its presence is revealed by Gerhardt's reaction, which consists in pouring a drop or two of the official solution of perchloride of iron into the urine, whereupon, if the urine contain not less than 15 centigrammes per litre of diacetic acid, it becomes of a reddish violet colour.

Hart has just devised a simple means of determining the existence of acidosis (index of acidosis) by the colorimetric estimation of diacetic acid. First of all we prepare a control tube containing ten cubic centimetres of the standard solution of 1 cc. of diacetic acid and 20 cc. of spirit in 1,000 cc. of distilled water. In another test tube of the same diameter is 10 cc. of the urine to be examined, and to each of the tubes we add 1 cc. of the official solution of perchloride of iron previously diluted with an equal volume of water. The tubes are set aside until the contents are quite clear, when we can compare the depth of the coloration. If the control tube containing the standard solution is lighter in colour than the tube of urine, water is added to the latter until the tint becomes the same, taking care to note the quantity of water added for this purpose. By the aid of the following table we can then ascertain the acidosis index per litre:—

10 cc.	correspondents to	1
15 cc.	,,	1.5
20 cc.	,,	2
25 cc.	,,	2.5
40 cc.	,,	4
100 cc.	,,	10

The volumes of intermediate dilutions correspond to proportional indices.

This having been determined, all we have to do is to multiply the degree of acidosis per litre by the volume of urine emitted in the twenty-four hours, in order to obtain the degree of acidosis properly so-called.

By this method we can follow day by day the fluctuations in the excretion of acid generating acetone. The estimation of the preformed ammonia completes the evaluation of the acidosis. It has already been stated that ammonia excreted to the extent of two or three grammes in the twenty-four hours constitutes a state of acid intoxication which can be detected concurrently with the excretion of diacetic acid, thanks to the Ronchère rapid method of estimating the ammonia. This is based on the fact that formol, with an ammoniacal salt, gives hexamethylene tetramine, setting free the acid of the salt and thus enabling it to be readily titrated. With this information in our possession we can easily deduce the amount of ammonia that was in combination therewith.

For that purpose we take 10 cc. of urine diluted with distilled water so as to make 100 cc. This is exactly neutralised with decinormal soda solution in presence of phthaleine of phenol. We add 20 cc. of the commercial solution of formol, previously diluted with an equal quantity of water and neutralised. Into this mixture, by means of a graduated pipettee, we drop decinormal soda solution until the phthaleine turns pink. The number of cubic centimetres of soda solution required to effect this is multiplied by 0.17, which will give the proportion of ammonia contained in a litre of urine.

We have not discussed the determination of the acetone in the acid intoxication of diabetics, because it is generally recognised that acetonuria, from the diagnostic point of view, is less important than diaceturia and ammonuria, and that, as a matter of fact, it does not afford a trustworthy indication of the degree of the acidosis.

SOME OBSERVATIONS ON CARCINOMA OF THE BREAST.

By S. J. ROSS, M.D., Ch.B.,
Surgeon to Out-Patients, Bedford County Hospital.

The first case which I wish to record is that of a female, æt. 25, who had what appeared to be a simple adenoma of the breast. Microscopical examination, however, revealed the presence of a typical carcinoma.

The second case is that of a female, æt. 56, who had a small carcinoma of the right breast with adherent skin and retracted nipple. No axillary glands were to be felt. I removed the breast and opened up the axilla, where I found enlarged glands along the axillary and subscapular vessels and along the outer border of the pectoralis major, this latter muscle I removed. I then discovered a small, hard gland near the coracoid process. The pectoralis minor was then removed, together with this gland and some surrounding fat. The wound was completely closed (no drainage being employed) and healed by first intention.

The third case was that of a female, æt. 56, upon whom I operated six years ago. The carcinoma of the right breast was very extensive, and axillary glands affected. The breast and both pectorals were removed and the axilla cleared. The wound healed by first intention, and there has been no local recurrence. Twelve months ago she began to suffer from dyspnœa and I aspirated two pints of blood-stained serum from the right pleura. During this illness she became absolutely bald. She remained comfortable for three months and then dyspnœa reappeared. I withdrew three pints of blood-stained fluid from the right pleura and two months afterwards four pints. The fluid has not re-accumulated; but there are obvious signs of mediastinal growth. The patient is rapidly losing flesh.

Remarks.—These three cases appear to me of interest for various reasons.

The first case shows how necessary it is to make an immediate examination of tumours. We are apt to work by a rule-of-thumb method. Young patient, freely movable tumour, non-malignant. The first observation is correct, so also the second, but the deduction is by no means reliable and an erroneous deduction may cost the patient her life. We have no right to make a guess, if we have the means at hand of ascertaining a certainty.

The second case proves the importance of opening up the axilla in all cases of breast cancer, even if glands cannot be felt, and furthermore, having cleared the axilla it is absolutely necessary to carefully examine the region of the coracoid process. In this case there was one small gland, but microscopically it proved to be malignant. Had this been left early "recurrence" would have been certain. I am sure that whenever possible we should avoid drainage, even of an extensive wound, as we so frequently find a recurrence appears at the site of drainage. It is better to allow the patient to come round a little before closing the wound, and by so doing to ensure complete hæmostasis, than to keep the patient deeply under the anæsthetic until the final skin suture is inserted. We must remember that the danger of infection from without is greater than the danger of infection from within. The third case is interesting on account of the local wound remaining unaffected, the mediastinal affection progressive. The pleural invasion being at present "in abeyance," and the appearance of total alopecia, which has been followed by a rapid growth of hair during the past three months.

I firmly believe that as the precancerous stage of cancer is inflammatory, all breasts affected with chronic mastitis after the patient has reached fifty years should be removed. That no breast tumour should be regarded as simple until it has been proved so by microscopical examination. That the sooner we cease to worship the age incidence of malignant disease as a fetish, the better it will be for the patient and the reputation of surgery. That the sooner we recognise that the extensive wounds of breast amputations should be closed and not necessarily drained, the less frequently we shall hear of "recurrence" in the scar.

Merely to dissect away the pectoralis fascia when operating for breast cancer is to court disaster. When operating upon cases of cancer of the breast we must be prepared for an extensive and tedious dissection; otherwise, we had better leave the case alone. In every case, however small the primary growth may be, we must remove the breast, open the axilla and clear away all glands and fat, and remove the pectoralis major, if we have the least doubt about the state of affairs around the coracoid process we should also remove the pectoralis minor. Finally hæmostasis must be complete; and drainage of the wound is to be avoided.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Carcinoma of Breast.—Mr. Willmott Evans operated on a woman, æt. 49, for malignant disease of the left breast. For nearly nine months she had noticed in the left breast below and to the outer side of the nipple a small hard mass, which gradually increased in size. It caused but little pain, though she said that occasionally she felt shooting pains in it. On examination, the left breast was decidedly larger than the right, fulness being most marked in the outer and lower quadrant. The skin was slightly dimpled in this region, and the nipple was less prominent than in the other breast. On palpation there was felt a very hard mass about the size of a walnut. It was not separable from the rest of the breast substance, and was obviously attached to the skin. When the pectoralis muscle was put on the stretch by raising the left arm, and directing the patient to draw it down against resistance, it was clear that the mass was slightly attached to the muscle. On examining the axilla there was felt a little fulness on the inner side, but no definitely enlarged glands could be distinguished. The diagnosis, Mr. Evans said, was clear that carcinoma of the breast was present.

At the operation, the patient having been anæsthetised with ether, an incision was made from above the xiphisternal notch in a curved direction to the shoulder, passing about three inches above the nipple and reaching to a point an inch in front of the tip of the acromion process. A second incision, starting from the first about four inches from it origin, passed four inches below the nipple and joined the upper incision about three inches from its termination. The flaps thus marked out were raised, and then the axilla was cleared from above downwards, the axillary vessels being bared and the tendon of the pectoralis major divided near its insertion. Then the breast was separated at its margin and taken away, together with the greater part of the pectoralis major muscle. The bleeding was at times somewhat profuse, but was readily controlled with artery forceps. When all vessels were tied it was found that the edges of the flaps could be brought together nearly everywhere, but about the centre there was a small area two or three inches in extent which was not covered. However, by slightly undermining the flaps they could be adjusted so as to cover this area also. Catgut stitches were used. Gauze dressing was then applied, and bandages were put on to retain the dressings, but the arm was not fixed in any way.

Mr. Evans said that in every case in which a hard mass was felt in the breast of a patient over 30, the mass should be removed. If no other signs confirmatory of malignancy were present it was sometimes advisable to incise the growth before performing total removal of the breast, but if this were done, and the growth found to be malignant, the incision should be linted, and a completed set of fresh instruments should be used for the operation of excision, so that there might be no risks of infecting the wound by instruments which might have become contaminated by the incision of the malignant growth. The upper part of the incision, which is made for the purpose of clearing the axilla, should not pass through the axilla at all, for the skin in that region is not readily made aseptic, and moreover, if the incision is placed high up on the shoulder a far better view of the contents of the axilla is obtained. It is advisable, he thought, that all tissues which are to be removed should be taken away in one mass, and it is well to clear the axilla first so that when the breast itself is being excised there may be no risk of generalising cancer cells by manipulation of the breast. It was advisable, he considered, to cover completely the raw surface, but the skin incisions must be planned to insure the complete removal of the disease. By undermining the skin it is often possible to cover the raw surface completely, but if this could not be done, a skin graft a few days later would suffice. He regarded it as important that the arm of the patient should not be fixed in any way after the operation. Formerly, he pointed out, it was customary to bandage the arm to the side, and some surgeons now fastened the patient's wrist to the head of the bed; but both these methods, he thought, tend to lead to subsequent stiffness. It was far better, in his opinion, to let the patient place the arm in the position she preferred, and when this was done there was a minimum loss of mobility after the operation. With regard to the general question as to what cases of cancer of the breast should be operated upon, he considered that cases of carcinoma of the breast might be divided into four classes. In the first class were those cases in which the tumour was of recent appearance, not of rapid growth, with no adhesions to the skin or muscle, and with no glands in the axilla; in these cases the prognosis was exceedingly good, and if the complete operation were done the vast majority of patients would be permanently cured. In the second class were those cases in which the duration of the disease was a little longer, the skin was slightly adherent, and there might even be some adhesion to the muscle, but no glands could be felt in the axilla; in this class it was right to urge an operation on the patient, for if an operation were done at once there would probably be no recurrence in 50 per cent. of the cases provided the complete operation were performed. In the third class, not only was the skin adherent to the tumour, and the tumour itself attached to the muscle, but palpable glands were found in the axilla; in these cases the chance of cure by operation was materially less; but still if the patient was made to understand that the chances of perfect recovery were small, an operation was justifiable. In the last group would be cases with a long history or with very rapid growth of the tumour, which was firmly adherent both to the skin and to the muscle, and the axilla was occupied by a large mass of glands; all operation was useless. Mr. Evans did not consider that malignant disease was in the least hereditary, and the fact that a relative of the patient had died of malignant disease did not affect his diagnosis in any way.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Clinical Section.

Meeting held October 11th, 1912.

The President, Sir William Osler, Bart., in the Chair.

Dr. A. M. Gossage showed a woman, æt. 53, the subject of

COARCTATION OF THE AORTA.

The patient was the same as that exhibited at the last meeting of the section by Dr. Langmead.

Mr. H. Morriston Davies showed a man, æt. 47, illustrating the favourable results of

ARTERIOVENOUS ANASTOMOSIS FOR GANGRENE DUE TO SYPHILITIC ENDARTERITIS.

This patient was shown at a meeting of the Clinical Section a year ago. The history of the case was briefly as follows:—He had had syphilis and had been a heavy drinker. He first noticed pain in the left foot and discoloration of the middle toe in March, 1911. The toe became gangrenous and was amputated in June, and the wound was left open. At the beginning of August two further patches of gangrene appeared, one on the inner side of the fourth toe and one on the outer side of the second toe. The foot was cold and painful, and there was purple discoloration of the great toe, the dorsum of the foot, and round the head of the fifth metatarsal; the amputation wound was unhealed. An arteriovenous anastomosis was done in Hunter's canal on August 15th, 1911; the proximal end of the superficial femoral artery being united to the peripheral end of the femoral vein and the proximal end of the vein and distal end of the artery being ligatured. The pain and discoloration disappeared after the operation, the foot became warm, the gangrenous patches separated off, and the wound at the base of the middle toe healed. The patient began walking a month after the operation and was discharged from the hospital after another four weeks. A week later he was readmitted under Sir J. Rose Bradford, suffering from a right-sided hemiplegia and aphasia, thought to be probably due to syphilitic thrombosis and to be unconnected with the anastomosis. The patient had slowly recovered from this attack, and had been able to walk with the help of a stick for some months. The condition of the left foot had remained good. There was, when exhibited almost fourteen months after the operation, no pain, discoloration, or œdema. The patient had a chillblain on the great toe of the left foot last winter, but that cleared up completely.

Dr. A. E. Gow, for Dr. W. P. Herringham, showed two brothers exhibiting.

UNUSUAL RASHES.

The patients were aged 5 and 2 respectively. The younger was shown by Dr. Adamson before the Dermatological Section of the Society in May of this year. Both children, from a few months of age, had dusky hands and feet and an eruption. This eruption had become much less marked during the past few months in the elder boy, and with its subsidence the interphalangeal joints, which were previously swollen, had become red and painful. The character of the eruption was briefly as follows:—On the forearms, hands and legs were papules about 3 mm. in diameter, reddish-brown in colour; papules, 5 mm. in diameter, with black crusts in the centre; circular, crateriform areas 10 mm. to 30 mm. in diameter, with raised, reddened margins and a large central scar; several healed lesions resembling vaccination marks. The papule apparently evolved through its stages in from two to three weeks. The elder child had never been able to walk properly, probably owing to genu valgum, which had become worse during the last year, and he was stated to have lost flesh during this time. There was a fusiform peri-articular swelling on all the fingers. A skiagram showed no alteration in the bones. There was no muscular wasting, the nails were natural and the tendon reflexes brisk. There were a few palpable glands in the anterior triangles of the neck. The spleen was not palpable, and there was no fever.

It was suspected that the lesions were of the nature of a tuberculide. Von Pirquet's cuti-reaction was negative, but after injection of 0.0002 c.c., 0.0005 and 0.001 c.c. of old tuberculin there was a general reaction with rise of temperature to 101.4° F. in the case of the younger boy. There were, however, both previously and subsequently, unexplained rises of temperature. The elder showed no reaction to tuberculin, even with a dose of 0.004 c.c. The Wassermann reaction was negative in each case, and the blood showed no cytological change. As a result of treating the younger brother with tuberculin (T.R.) there was local reaction in the spots, and many healed without passing through the scab stage, the resulting scar being not nearly so marked.

The President showed a girl, æt. 20, illustrating

CIRCULATORY DISTURBANCE WITH CERVICAL RIB.

In February, 1912, she had fallen and bruised the right elbow, apparently not a serious injury. About the end of May she had noticed that after using the right arm it became darker in colour, the hand swelled, and the veins of the neck became distended. She looked well; physical examination of the chest and abdomen negative: no enlargement of the glands. The right pupil was a little larger than the left. At rest the right arm looked natural, but measured above the elbow ¾ in. more than the left. There was no atrophy of the muscles of the hand; sensations were perfect. After using the muscles of the right hand for a few minutes the following changes occurred: The skin reddened, at first on the inner side above the elbow, then the redness became general; the arm swelled, increasing ¼ in. by measurement; the pulse in the right radial became smaller, the blood-pressure fell from 115 mm. of mercury to 90 (it was normally a little less than on the left side), the veins in the neck became enlarged, particularly the external jugular, and there was prominent venous swelling above the inner end of the clavicle. Continuing the exertion, the arm felt numb and dead and she had to rest.

The X-ray pictures showed cervical rib on both sides, the right a little longer, both of moderate size. The case belonged to a group of cases of cervical rib which he had described, in which the arm is normal when at rest, but on exertion becomes swollen and livid, and muscular effort has to cease—features resembling the condition known as intermittent claudication. In many cases of cervical rib the subclavian has been compressed in the angle between the rib and the scalenus anticus. In the present instance the rib looked short, but it was possible that there might be a cartilaginous extension. When at rest, and with slight muscular effort, sufficient blood reached the limb, but the demand for increased blood flowing upon exertion was not met, and there was stiffness with numbness and vascular changes. Cases have been reported suggesting Raynaud's disease, and Keen states that there are at least seven instances of local gangrene of the finger associated with cervical rib.

Dr. F. **Parkes Weber** showed a case of

GIANT URTICARIA OF FIVE YEARS' DURATION.

The patient, a man, æt. 31, was subject to swellings of various sizes, which might affect any part of the surface of his body, and were generally accompanied by a sensation of itching. The skin over these swellings is always more or less reddened. The swellings were sometimes large enough for a single one to cover the whole of a shoulder or a buttock. Sometimes the swellings succeeded each other so quickly that he did not become free from them for any length of time. Muscular exertion favoured their occurrence. Scratching made them worse. Diet apparently played no part in inducing them. Temperature (cold bathing, etc.) seemed to make little difference. The swellings sometimes lasted two or three days, but sometimes they disappeared within twelve hours. The patient said that as yet nothing has done him any good, and that the affection was neither better nor worse than it was when it commenced about five years ago. There was no history of any similar disease in others members of the family, as there often is in typical cases of angio-neurotic œdema.

Dr. **Weber** also showed a case of

MULTIPLE CALCIFICATION ("CALCINOSIS") IN THE SUBCUTANEOUS TISSUE.

The patient was aged 7, and had been admitted to the German Hospital for a number of hard nodules in the subcutaneous tissue of the extremities and the portion of the trunk adjoining the extremities. Most of the nodules were smaller than an average pea, but some were much larger, having apparently arisen by the coalescence of several smaller nodules. The face, head, thorax and abdomen are practically free. The nodules, as a rule, gave rise to no pain or tenderness, and seemed to have developed without the child being aware of their existence. The lymphatic glands in the groins and right axilla, and some in the neck, were moderately enlarged.

The nodules were first noticed 15 months ago, and many others had appeared since. One little nodule near the right knee became very prominent and discharged spontaneously.

That the subcutaneous nodules consisted largely of carcareous material had been proved both by Röntgen-ray examination and by chemical analysis. The nodules occasionally became inflamed and softened and the skin over them adherent. Two such softened nodules had been excised and examined. The gritty material was found to consist of calcium carbonate and calcium phosphate. No tubercle bacilli or other microbes could be detected in the contents of the nodules. Microscopical sections of a softening nodule showed that the nodules consisted of a sponge-like matrix of subcutaneous connective tissue in the interstices of which the granular particles were embedded. "Calcinosis" was probably the most convenient term to be used for the disease in question, and more advanced cases had been described under the headings "calcinosis interstitialis," and "calcinosis universalis." Apparently the chief danger was the risk of septic infection associated with the "breaking down" and discharge of the calcareous nodules.

Dr. H. **Batty Shaw** and Mr. **Percy Hopkins** showed a boy, æt. 7, with (a) doublejointedness, (b) dermatolysis ("elastic skin") with great friability of the skin and excessive tendency to bruising, (c) multiple subcutaneous tumours on the limbs (? fibromata, ? neuromata). The joints were very loose, and the child took particular pleasure in forming almost circles by locking the index and middle fingers of each hand. He was somewhat pigeon-chested, and there was marked lateral curvature of the dorsal spine, with the convexity to the left. The skin was soft and could be drawn readily from the limbs and body, as in the condition known as dermatolysis, or "elastic skin." Numerous small subcutaneous nodules could be defined in the limbs, from the size of a small millet seed to that of half a pea. They were not painful, and were not restricted to the neighbourhood of the joints, nor apparently to the large nerve-trunk. Bruising was very readily produced even by moderate pressure; the mere holding of one upper arm on the occasion of the first visit was followed by several hand-marked bruises observed a few days later. He fell readily on attempting to walk quickly or to run; the fronts of the knees and the chin bore evidence in the form of scars. Quite small falls caused the skin to rupture. So far as either parent knew, there was no other example of such a condition in any member of their respective families.

Mr. **Lawrie H. McGavin** showed a patient illustrating

ABDOMINO-PERINEAL EXCISION OF THE RECTUM: TRANSVERSE COLOSTOMY.

Eighteen months ago the man, æt. 57, was admitted with carcinoma of the second part of the rectum, causing much pain on defæcation. The growth was a large cauliflower mass, bleeding readily, and very slightly attached to the sacrum. Under chloroform a transverse colostomy was performed, and the abdomen having been opened, both internal iliac arteries were ligated. The sigmoid colon was divided between ligatures, the end of the upper section being inverted. The end of the lower portion was carbolised, tied up in gauze, and after the bowel had been stripped into the pelvis, was returned to the pelvis and the abdomen was closed. In the lithotomy position, the anus having been closed, the bowel was removed *via* the perineum. A tear occurred at the site of the growth, which was here more fixed to the sacrum than had been thought. Some infection of the wound occurred, but the suppuration was confined to the superficial layers. The bowel was opened on the third day. The patient had made a good recovery.

Mr. **McGavin** also showed another successful case of the same condition, in which the operation had been performed on a woman, æt. 67. Spinal anæsthesia had been employed almost exclusively. The operation had been done 16 months before. Also the following cases:—*Torticollis following mumps and associated with bilateral cervical ribs*, in a girl, æt. 11. He thought that the condition was probably rheumatic and unconnected with the abnormal ribs. *Oblique fracture of the femur into the knee-joint and of both tiabæ and fibulæ.* Arthrotomy had been performed and the condyles of the femur united by screws. The patient was a man, æt. 48, who had been struck by a swinging baulk of timber. The displacement of the femoral fragment had been so bad that three inches of shortening had existed. *Serous cyst in the ramus of the mandible.*—This had been evacuated and its lining membrane removed. Microscopical examination gave no clue as to its nature.

Mr. McGavin also exhibited an apparatus which he had devised for exerting extension on the fragments in cases of fracture in the length of the tibia. This apparatus could be placed on the operating table, the operation of plating and screwing being carried out upon it, when, by exercise of tension obtained by the screw, the fragments have been brought into line. By its use the operation, especially in cases of old oblique fractures, was greatly facilitated, and the time of operation much reduced.

Mr. Paul B. Roth showed a carman, æt. 54, with

TRAUMATIC MYOSITIS OSSIFICANS.

An ossified mass occupied a position in front of the right femur. Its uper part was attached to the bone, but its lower was fragmented, and seemed to be free in the muscle. It had followed a kick from a van-horse.

Dr. F. E. Batten showed a case of

TREMOR: ? NATURE.

A man, æt. 43. In December, 1911, he had an attack of swelling, pain and redness, involving chiefly the hands, to a much less extent the feet, lasting about a month. In August, 1912, he had a second similar attack of about a month's duration.

Shortly after the second attack his arms and legs began to shake slightly, both at rest and on movement. The shaking gradually increased, especially on the right side, and reached its height in about a month. He was then unable to hold anything in his right hand, and his right leg appeared to drag. Since then the shaking had lessened somewhat, especially on the left side. He complained also of occasional painful cramps on the dorsum of the right foot.

The patient's emotional state is decidedly exalted. The tremor affected all four limbs and persisted during rest. It increased by movement and when the patient felt himself observed. The tremor of the right hand when at rest was coarse, wide, rapid, consisting chiefly of rhythmic lateral movements at the wrist, with accessory accompanying movements at the elbow and shoulder. The static oscillations were chiefly in a vertical axis, and sometimes became so violent and rapid as to obscure altogether the outline of the hand. The movement tremor resembled the intention type in that the oscillations became more violent and of wider range towards the close of the act. He considered the tremor was functional and unconnected with organic disease.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Meeting of the Thirty-first Session, October 4th, 1912.

The Retiring President, Mr. W. McAdam Eccles, in the Chair.

Before proceeding to the business of the evening, the chairman referred to the great loss sustained by the Society, since its last meeting, through the unexpected death of Mr. Leonard Bidwell, a past President of the Society, and a vote of condolence to Mrs. Bidwell and family was passed by the members present.

Mr. McAdam Eccles then inducted the new President, Dr. G. P. Shuter, and the latter presented the retiring President with the "Keetley Memorial Medal"; a medal presented to each retiring President as a memento of his tenure of office, and Dr. Shuter, speaking on behalf of members, hoped Mr. Eccles would look upon it as an acknowledgment in some degree of the great services he had rendered to the Society.

Some further business having been transacted, Dr. Shuter delivered his inaugural address on the

HISTORY OF NITROUS-OXIDE ANÆSTHESIA.

After some preliminary remarks, he traced its history as an anæsthetic through three periods, the first commencing in 1800 with the publication of Davy's researches, and ending with its application by Horace Wells to practical use in dentistry in 1844; the second period from that date to its revival in 1864: the third period from its revival to the present day.

Priestley discovered the gas in 1774. Humphry Davy observed all the usual symptoms resulting from its inhalation, and at the age of twenty-two published his researches. Towards the end of his essay Davy makes this remarkable suggestion, remarkable as showing his power of reasoning and deduction, but more remarkable in that the passage, although it must have been read by thousands, was never acted on. He says, "As nitrous-oxide in its extensive operation seems capable of destroying physical pain, it may probably be used with advantage in surgical operations in which no great effusion of blood takes place."

Davy was the most popular and eloquent lecturer of his day, at a time when lectures were the fashion, and a good lecturer was much sought after. His experiments were repeated by innumerable imitators to such an extent that it was a common event for itinerant showmen to entertain an audience at a country fair by chemical experiments, and one that never failed to cause amusement was the inhalation of "laughing-gas," and in America entertainments called "ether frolics," or "laughing-gas frolics," kept alive the knowledge of the curious action of nitrous-oxide and ether. Thus the modern practice of anæsthesia was born.

On December 10th, 1844, Dr. Colton, a pupil of Professor Turner, of University College, London, a popular itinerant lecturer on chemistry, went to Hartford, Connecticut, and delivered a lecture on "laughing-gas," and Horace Wells, an enterprising dentist in that town, being much impressed by what he saw and heard, conceived the idea that a tooth might be removed painlessly under its influence. He determined to put the matter to the test without delay, and the next morning invited his friend Dr. Riggs to pull one of his molars after Colton had administered gas. Elated with the success of the experiment, he declared it to be the greatest discovery ever made—a new era in tooth-pulling! Success followed for a time, but soon a demonstration in Boston resulted in a failure, and Wells was treated as a cheat and an impostor. Easily depressed as he had been elated, he never recovered from his disappointment, and after being reduced to want and actual starvation, died, by the irony of fate, under the influence of the anæsthetic introduced by his pupil, partner and rival, Morton. It would be difficult to picture a more melancholy and pathetic figure than Horace Wells, but this tragedy must not fill our vision to the complete exclusion of the patient work of Colton, who not only inspired Wells with his brilliant discovery, but was responsible for the most practical improvements in its administration, and for its revival in America, France and England.

During the next twenty years little progress was made, until, in June, 1863, Colton happened once again to be lecturing in Newhaven, Connecticut, and exhibiting the "laughing-gas," as usual, when Dr. Joseph H. Smith, who practised in the town, obtained his assistance for the extraction of seven teeth in the case of a lady patient in a very delicate state of health, to whom he did not wish to give ether. The teeth were extracted without the patient being sensible of any pain, and during the next three months 3,929 teeth were extracted without any ill effects. Colton was now an expert and imparted skill and knowledge to his pupils. In July, 1863, he moved to New York, and in the course of three years administered gas 17,601 times without mishap. By 1868 the use of nitrous-oxide was general all over the United States.

In July, 1867, Colton journeyed to Paris, where his teaching was received with enthusiasm, and in the following March one of his pupils, Evans, gave a demonstration of the new anæsthetic, as it was called, at the Dental Hospital, Soho Square. Other demonstrations quickly followed, and Paget, who witnessed an exhibition at St. Bartholomew's Hospital, made this wise and cautious comment: "After seeing Mr. Coleman give nitrous-oxide, I cannot doubt its sufficiency for procuring total insensibility to the pain of short operations. The appearance of asphyxia is alarming, but it is so brief that one may believe that even if it were profound it might do no harm. The question of danger, however, can only be decided by the results of some thousands of cases."

By August 1st, 1868, it was permanently installed in all the large London Hospitals, so that its spread was even more rapid on this side of the Atlantic than the other, in spite of warning notes sounded by some surgeons and physicians, and notwithstanding powerful opposition in certain quarters, the extended use of nitrous-oxide for more serious and prolonged operations made uninterrupted progress.

Gas was administered to the first dental cases with the same primitive apparatus that was used in laboratory experiments—simply an ox-bladder, in which was fixed a wooden tube as a mouthpiece. Anæsthesia was secured by pressing the lips round the wooden tube and holding the nose to compel the patient to breathe to and fro into the bag. When Colton insisted on a plentiful supply of pure gas and introduced his inspiratory and expiratory valves the future of nitrous oxide was assured. Colton discovered the necessity of the complete exclusion of air to procure rapid anæsthesia, and the necessity of correct proportion of air to maintain a quiet anæsthesia for a prolonged operation. He noted, too, that vomiting after mouth operations was frequently due to the blood which had been swallowed. Coleman found that long anæsthesia followed a long induction after removal of the face-piece, and that it was advantageous to give a small quantity of air during induction for this purpose.

Clover invented new instruments and made improvements in others which are in use to-day. He also gave directions for preparing patients for operations: he classified the signs of anæsthesia, and he taught how to interpret and make use of them. He shrewdly anticipated nitrous-oxide and oxygen anæsthesia by fitting a valve for regulating the percentage of air, and the administration of nitrous oxide was placed, within a few months, on such a sound footing that little alteration in our methods has been required by later additions to our knowledge.

In conclusion, Dr. Shuter reviewed the evolution in the preparation and supply of nitrous oxide. At first surgeons and dentists made their own gas; later this was sold by Bell and other chemists in large rubber bags, and when at length the demand was sufficient to make it pay, Mr. George Barth solved the difficulty. He was already selling compressed oxygen for medical purposes, and it was a small step to treat nitrous oxide in a similar fashion. Finally, Mr. Orchard supplied liquefied gas under safer conditions. It is of interest to note that Evans was the first to make use of gas in the liquid condition. In June, 1868, he paid a second visit to the Dental Hospital and brought over with him from Paris a quantity of liquid gas in a bronze bottle. It was here he made the further suggestion that the liquid gas might be used for producing local anæsthesia.

A hearty vote of thanks, proposed by Mr. F. Swinford Edwards, and seconded by Mr. Rickard W. Lloyd, was accorded to Dr. Shuter for his interesting address.

The following cases were shown and discussed at the meeting:—

By Dr. Leonard Dobson: a case of angio-neurotic œdema.

By Mr. N. Bishop Harman: (1) a case of senile cataract followed six days later by vitreous hæmorrhage—recovery; (2) a case of pneumococcic hypopyon ulcer treated with a mixture of pure carbolic acid and camphor (equal parts).

THE
NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held October 10th, 1912.

The President, Dr. P. S. Abraham, in the Chair.

The opening address was delivered by Dr. G. Stopford-Taylor, of Liverpool, on

SOME PRACTICAL POINTS IN THE TREATMENT OF ECZEMA,

which is published in full on p. 402.

The **President**, in thanking Dr. Stopford-Taylor for his practical and useful paper, said that most dermatologists were now agreed that traumatic inflammations of the skin were indistinguishable from ordinary eczema. The toxins from certain septic organisms were also frequently responsible for outbreaks of eczema. He considered that starch poultices, as introduced into dermatology by Professor Allan Jamieson, of Edinburgh, were of great value, but he was rather afraid of the irritating effect of boric acid in some cases.

Dr. **H. Samuel** thought that the more one understood the more one tended to exclude the word eczema.

Dr. **Serrell Cooke** was interested to hear the remarks of Dr. Taylor upon the use of Ung. Resinæ. He had often employed it to abort boils.

Dr. **David Walsh** said that it seemed to him curious that we had no really satisfactory definition of eczema. He was interested to hear in the question of the occurrence of erythematous rashes in connection with wounds of the skin. According to his view, expressed many years ago, this was an excretory irritation, due to the absorption of some septic poison. Dr. Taylor had regarded this phenomenon as nervous. Why not assume that the toxin acted directly upon the skin? Few of us would admit, for instance, that a copaiba rash was a nervous phenomenon. He called attention to the fact that many of the modern remedies used in dermatological practice were far more heroic than those formerly employed.

Dr. **Dennis Vinrace** thought that universal specialists were impossible. If dermatology were introduced into the medical curriculum as a compulsory subject, other portions would have to be somewhat thinned.

Dr. **Alfred Eddowes** did not mean a very definite thing when he referred to eczema—not like small-pox, for instance,—but he regarded it more as a symptom. Eczema was, in fact, a moist catarrh, a true dermatitis, but every case of dermatitis was not one of eczema. In very chronic cases he had obtained good results with mercurial plaster. He emphasised the need for keeping clear the lower bowel, especially in cases of the nervous type,—Brocq's *nevro-dermite*.

Dr. **C. G. Mack** alluded to the lack of dermatological teaching in former times, and he thought that the diagnosis often brought by patients' friends as having been given by general practitioners should always be accepted with reserve.

Dr. **J. D. P. McLatchie** inquired as to the use of liquor potassæ in cases of chronic eczematous patches.

Dr. **Wilmott Evans** regarded a mechanical, irritative dermatitis as identical with an eczema. He considered that it was wrong to give it another name, merely because the cause happened to be known, Just as an exudative synovitis might result from a number of causes, so might eczema. He thought that the *role* of the nervous system had been rather overworked as a theory, for in many cases the cause of the disease was internal. For that reason, therefore, the treatment could not be limited to the skin.

Dr. **Stopford-Taylor** after having briefly replied, then read

NOTES OF A CASE OF DARIER'S DISEASE,

illustrated by lantern slides. The patient had been previously exhibited before the Society. Dr. Taylor also showed slides and casts of an apparently hitherto undescribed disease, characterised by the appearance of fine, waxy ridges and papules all over the surface of the trunk and face in a woman. It is hoped to publish an account of this unique case.

Dr. Eddowes exhibited some interesting drawings and photographs of diseases of the nails and other skin affections, and a series of water-colour drawings were exhibited by Dr. Walsh to illustrate his views upon the association of heart disease with many forms of chronic or recurrent skin eruptions.

CENTRAL MIDWIVES' BOARD.

Sir Francis Champneys presided at the monthly meeting of the Board on Thursday last, October 10th.

The correspondence included a letter from the Clerk of the Council conveying the approval of the Lords of the Council of the fixing the scale of the present Secretary's salary at the following rate—£600—by annual increments of £25—to a maximum of £750—to take effect from the 1st April, 1912.

At the request of the Board, the Chairman agreed to write to Lady Sinclair, conveying the sympathy of the Board in her bereavement.

A letter was read from Dr. Harry Stokes, of New Wortley, Leeds, whose application for recognition as a teacher was refused by the Board at its meeting on July 25th, asking the Board to reconsider the matter. A letter was also read from Miss Violet Thurstan, County Superintendent of the West Riding Nursing Association, supporting Dr. Stokes's application.

The Board adopted the recommendation of the Standing Committee: "That, having heard and considered the new facts which have been brought to its notice regarding the West Riding Nursing Association, Dr. H. Stokes be recognised as a teacher."

No action was taken in the matter of a letter from a candidate who failed at the August examination, complaining of unfair treatment on the part of an examiner.

COMPULSORY ATTENDANCE OF MEDICAL MEN IN MIDWIFERY CASES.

A letter was read from a certified midwife, practising in Chesterfield, complaining of the issue by the Chesterfield Division of the British Medical Association of a circular, with reference to the conditions affecting the practice of midwifery in that town.

A letter was read on the same subject from a medical practitioner in Chesterfield, upholding the midwife. The circular contained instructions that no midwife should engage her services for any confinement without first sending the patient to a doctor, who was to examine her, and receive a fee of 5s. In the event of his assistance being required at the confinement, his fee would be one to two guineas, from which the 5s. would be deducted. There were various details connected with this compulsory employment of the doctor, and the circular concluded with a threat to report all midwives who did not conform to them, to the British Medical Association and the Midwives Union. It did not state what authority these bodies held over midwives. The reason alleged for the issue of these rules, was, that the safety and welfare of mothers and children was of first importance; and a recent inquest had been held on a woman who had died in childbirth, because the doctor refused to go when he was sent for by the midwife.

The Board resolved to reply (1) That, if the midwife has obeyed the rules of the Board regulating the summoning of medical aid, she has discharged her duties to the patient; (2) That the Board has no authority over medical practitioners. It was also agreed (3) That the correspondence be forwarded to the Privy Council.

In reply to a complaint from Dr. Maxwell, one of the Board's examiners, of a circular issued by a midwife, he was informed that no rule of the C.M.B. had been infringed by the advertisement referred to, which merely stated that the midwife "attended confinements with and without a doctor." There was some correspondence relating to the administration of the Maternity Benefit under the Insurance Act, and the payment of medical men called in on the advice of Midwives. In reply to a question, it was stated: That the Town Councils of Liverpool, Manchester, and Cardiff have made agreements with all the medical men in their districts for a fee of one guinea all round, when summoned to a case attended by a midwife, and that elsewhere the fee varies. That the authority by whom the fee is paid is the Local Supervising Authority in Liverpool, Manchester and Cardiff, and the Guardians in some other places.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Oct. 12th, 1912.

Treatment of Boils.

The region is washed with soap and water, dried, and a drop of the following solution is placed on the centre of the boil:—

Iodine, 1 dr.
Acetone, 3 dr.

Let stand a week before using. The mixture becomes blackish and syrupy and no longer irritating. Later, if the boil does not recede, a dressing of glyosiate of starch and boric acid (1-10) on absorbent wool is applied.

Pain in the Side.

Consumptive patients frequently complain of a pain in the side, generally due to the irritation of some nerve. A treatment as efficacious as it is simple consists in injecting half a drachm of boiled water *loco dolenti*. Generally one subcutaneous injection suffices and the pain disappears in from 20 to 30 minutes.

Erysipelas.

The parts are painted once a day with—

Tincture of iodine, 1 oz.
Guaicol, ½ dr.

If a small skin forms it can be removed by glycerine. Under the influence of this treatment the skin wrinkles and desquamation commences towards the fifth or sixth day, when the applications are suspended.

Hæmorrhoids.

The medical treatment of piles is internal, external and dietetic. Dr. Duba's method is as follows:—

Glycerine, 1 oz.
Linseed tea, 1 qt.

A wineglassful is taken every hour for the first three days of the inflammatory period; an improvement sets in on the second day. On the fourth day, if the state of the kidneys allows it, one of the following wafers is taken before each meal:—

Salicylate of soda, 10 gr.
Benzoate of soda, 10 gr.
Exalgine, 2 gr. No. 20.

If at the end of that time, and with concomitant external treatment, the cure is not complete, it should be recommenced.

The external treatment consists in sitz baths morning and evening, with 1 lb. of bicarbonate of soda, followed by the application of four or five leeches provided the condition of the patient permits it, after which the parts are painted with—

Cocaine, 10 gr.
Ext. of belladonna, 15 gr.
Ext. of hyoscyamus, 15 gr.
Glycerine, 5 dr.

and covered with a wet dressing and oil silk. When the inflammation subsides (three days), the following lotion is applied after the painting:—

Calomel, 1 dr.
Solution of adrenalin, 2 dr.
Lime water, 6 oz.

A plug of cotton wool moist with this solution is applied for three or four minutes each morning. At night the parts are powdered with—

Oxide of zinc, 2 oz.
Powdered opium, 1 dr.
Naphthol B., 2 dr.

Dietetics.—First three days, milk diet; lacto-vegetarian diet for ten days more, after which the patient may return to his usual *régime*. Rest in bed is necessary for a few days.

GERMANY.

Berlin, Oct. 12th, 1912.

At the Gesellschaft für Psychiatrie und Nervenkrankheiten, Hr. Bürger showed preparations from a case of hæmorrhage into the pons and medulla after

Poisoning by Methylic Alcohol.

The speaker had examined carefully the pons and medulla in three undoubted cases of poisoning by methylic alcohol as the clinical symptoms, especially the laboured breathing and the regular death by paralysis of respiration, pointed to the disease of these parts and especially the nucleus of the vagus. There was extensive hæmorrhage into this region, as Rühle saw in cases of methyl alcohol poisoning in dogs. It seemed that these hæmorrhages were regularly met with in such cases of poisoning. Even in acute cases of alcoholic poisoning there were hæmorrhages into the central nervous system, but in the ordinary alcoholic poisoning no special preference was shown for the medulla or the region of the vagus such as was the case in poisoning by methylic alcohol. The hæmorrhages therefore had a pathological significance, inasmuch as they were a confirmation that a particular death was due to poisoning by that form of alcohol, and also a clinical significance as they assisted us in arriving at a correct understanding of such cases. Sudden death by paralysis of respiration, which often took place like lightning from a clear sky, might be caused by hæmorrhage into the medulla oblongata, in the region of the vagus. Hæmorrhage into the nucleus of certain nerves might be the cause of paralysis of isolated muscles such as those of the eye, of the eyelid, such as actually did take place at times. From a therapeutical point of view hæmorrhages into the central nervous system, both in poisoning by methyl alcohol and in the more usual form from ethyl alcohol, were a reminder that we should relieve the system of the poison at the earliest possible moment.

Hr. Bonhoeffer said that exactly similar hæmorrhages to those described by the reader of the paper were also met with in the region of the aquæduct and the pons in extreme deliriums, and generally in severe intoxications, both of auto-intoxications and those from external causes. There was therefore nothing specific in the condition; they ranged themselves amongst the anatomical conditions of polioencephalitis hæmorrhagica superior in the sense of Wernicke's cases.

The difference was chiefly of a quantitative kind in so far as the injury produced by the methylic alcohol seemed to be very severe.

Hr. Marcuse had met with a similar condition in a fireman, who had been poisoned by smoke. Several weeks after the intoxication paralysis of the ocular muscles took place, which announced a most unfavourable course of events.

Hr. Bürger asked if in Hr. Bonhoeffer's cases of hæmorrhage in delirium tremens and poisoning by sulphuric acid death had been preceded by convulsions?

Hr. Bonhoeffer replied that the condition mentioned had been quite independent of epileptiform convulsions. It had occurred in cases of delirium, not as a direct effect of the alcohol, but as a secondary antitoxic poison which had developed on the basis of chronic alcoholism and led to the deliriums.

Treatment of Wounds of the Peritoneum.

(*Continued Discussion.*)

Hr. H. Grusdew, Kasan, said that washing out of the peritoneal cavity after laparotomy was useful to all appearance when non-virulent pus was present in the abdominal fluid, also in those cases in which the abdomen contained blood, fluid from cysts, intestinal contents, etc. When, on the other hand, there was recent pus containing, for example, streptococcous pus, washing out was extremely harmful as it generalised the poison. Here the pus should be removed with dry compresses, and the infected spot should then be covered or shut off from other parts by gauze drains. For washing out Locke's solution was the best at a temperature of 37.8.

Hr. Josephson, Sweden, said that cancer of the cervix should be treated before commencing a laparotomy. Disinfection of the hand by iodine was not dangerous to the peritoneum. Pure gonorrhœal free peritonitis was not dangerous to life, but as it was often called forth by mixed infection, unless this was at once excluded, laparotomy should be resorted to without delay.

In post-operative peritonitis the abdomen should be re-opened immediately. The indications were difficult to determine. It was therefore best to be guided by the functional activity of the bowel, and if signs of paralysis appeared a "Witzel's" fistula should be set up. In infective peritonitis the point of infection should be at once removed. Excessive washings out, emulsations, "milking" of the bowel should be avoided. In puerperal streptococcous peritonitis we should only achieve something in cases of sudden rupture of a pyosalpinx or other perforation; in the creeping form from extension after washing out the uterus it was already too late.

Hr. Oskar Beuttner, Geneva, gave material from a collective inquiry by 50 physicians as to whether operations should be dry or moist. No decisive distinction could be drawn. All the operators emphasised the necessity for peritonisation of the abdominal cavity. Thirty operated with gloves, 20 without, or only conditionally. For closing the wound catgut had the preference. For asepsis and in wounds of intestine the finest silk was used. Thirty operators only considered the following as indications for vaginal drainage: suspicious pus (in the abdomen), appendicitis, Wertheim's operation for carcinoma, septic peritonitis, intestinal complications, uncontrollable parenchymatous hæmorrhage, great loss of peritoneal surface, in the pelvis, suspicious ovarian tumours, vaginal total extirpation of the uterus. Strict asepsis, tender handling of the peritoneum, complete arrest of hæmorrhage were chief points for success.

Hr. Recasens, Madrid, said the vagina was the natural outlet for discharge from the pelvis, but that drains, whether of gauze or glass, rather prevented the union of wounds than provided for discharge. They should not be left in longer than 24 hours, except in exceptional cases.

AUSTRIA.

Vienna, Oct. 12th, 1912.

Syphilis.

The International Congress for syphilis and dermatology had an interesting subject this year that led to a heated duel between French and Austrian authorities. Milian, of Paris, related the excellent results he had obtained from salvarsan therapy combined with mercury and iodide. He maintained that it caused an abortion of the syphilitic virus and reinfection and improved para-syphilitic conditions as well as leucoplacia tabes and the progressive paralysis, even curing recent tabes. His method of administering the drug was to give four intravenous injections every 5th or 6th day, increasing the dose from 0.3 to 0.6 of a gramme or 4 injections in 20 days; then a pause of 10 days, after which 8 injections of oleum cinereum and calomel in doses of 0.7 of a gramme, varying the latter with 8 injections of hydrarg. benzoatum in doses of 0.02—0.04 of a gramme, to which may be added an injection at first in the middle of the week of iodide of potassium gradually increased once a day to 3 grammes; finally a rest of 10 days and again 4 intravenous salvarsan injections given as above every 5th day.

Hallopeau recommended the use of heptine in doses of 0.02 of a gramme, while Gaucher affirmed he could not cure tabes or progressive paralysis, as Milian had stated and thought his cases were chancriform papules. He is convinced that salvarsan is no better than mercury. Rosenthal is of opinion that mercury and salvarsan are effectual in the majority of cases and is in favour of the intravenous application. He believes that central nerve diseases are more common when salvarsan is given alone than when mercury is given in combination.

Nobl, of Vienna, said that his two years' experience of salvarsan treatment in 150 cases was quite abortive. Out of this number Wassermann's test was negative in most of the cases. With a combination of arsenobenzol and mercury the appearance of secondary phenomena was latent for a year.

Oppenheimer, of Vienna, recorded 160 abortive cases that he had treated, 39 with salvarsan and 22 with mercury. He had tried various ways combined with excision, but the best results he obtained was giving the salvarsan immediately after excision with energetic mercurial inuncition. Finger (Vienna) said he did not know whether it was the temperament of the Austrian or his food and drink that gave different results than in France, but he found that a recurrence of nerve diseases was more frequent with salvarsan than with mercury, such as epileptiform and psychic symptoms, the result of arseno-intoxication. The fatality was more provoked by the arseno treatment as lues cerebri, tubercular meningitis and encephalitic hæmorrhage were more common by this treatment than with mercury. Again, it is not proved that the spirochæta is killed by a combination of mercury and salvarsan, on which would rely the success of the treatment. The reinfection after treatment with salvarsan is not free from objection as it has an unfortunate result of producing chancriform efflorescence. Its rapid action on the organism and frequent recrudescence of nerve diseases is a serious objection to its use and the doses administered should be small. In short he did not consider salvarsan as a substitute for mercury in the treatment of syphilis.

CANADA.

Toronto, Sept. 28th, 1912.

Meeting of the Canadian Public Health Association in Toronto.

(*Concluded from page* 388.)

The Perpetuation of an Imperial Race.

Dr. Chas. A. Hodgetts, of Ottawa, the President, delivered a very able address. He, too, was fully aware of the need for Canada to put her house in order from the public health point of view, and pointed out that upon every hand there was evidence that the people of Canada were following in the footsteps of the people of older nations by ignoring the simple laws of health. He said that physical degeneracy and all its attendant evils consequent upon such neglect, was to be found in the most recently settled portions of Canada, while physical defects and their attendant social evils were in evidence in the rising generation, even of Toronto. Dr. Hodgetts said that no empire could stand for long whose men and women were not virile and strong, and that it was to a consideration of how Canada could do its share in this the greatest task of Empire, the *perpetuating of an imperial race*, that the subject of public health was presented to the Association which represented the health interest of the Dominion of Canada. The speaker was especially severe upon town planning and housing generally in Canada. He said, in fact, that they had before them evidence that bad town planning and housing led inevitably to increased municipal expenditure, and therefore, higher taxes. It was known that under inefficient legislation, bad housing conditions grow up, and that owing to these evil environments, disease, crime, immorality and poverty resulting in physical degeneration are inevitably the issues. Yet in Canada they were planning houses by the hundred each year, building, rather it might be said, throwing together houses, and worse than all permitting a foreign element to live under worse conditions than would be permitted in their own country, and there was no legislation in Canada which had a statesman of the calibre to propose a Bill which would adequately meet this alarming and awful situation. The gist of Dr. Hodgetts' address was that a Federal Health Department was necessary to properly cope with the situation. He drew attention to the fact that health was not only a matter for municipal consideration and action, but should also be dealt with by each national government. He showed that the medical inspection of immigrants was alone sufficient reason for the establishment of such a department, as the inspection now was inadequate and perfunctory. This was not the fault of the inspectors, but of the system. One or two medical inspectors were supposed to make an examination of several hundred persons often speaking a foreign language in a few hours. Dr. Hodgetts pointed out that a nation was like an insurance company, it accepted at a risk the life of each man, woman, and child passed as fit at the port of entry. Consequently the inspection should be adequate and thorough, and the result could best be brought about by the establishment of a National Health Department.

A Health Conscience.

A feature of the meeting was the delivery of an address by Dr. W. A. Evans, for many years the able and energetic Commissioner of Public Health of Chicago. Dr. Evans is an orator as well as being an efficient administrator, and held the close attention of a large audience of men and women for two hours. The speaker in the course of his address said that it was difficult to give the valuation of a health department in dollars and cents. Some cities like Ottawa recently, did not value their health authorities until impelled by fear to do so during an epidemic. Cities had grown and prospered, because of their freedom from epidemics; others had suffered because they had been cursed by devastating plagues. Dr. Evans alluded to the thorough manner in which Cuba and Panama, two notorious pest holes, had been cleaned, and to the way in which outbreaks of disease might be eliminated in small places and a "health conscience" might be awakened. The province of a health department was to show the people their duty.

Another feature of the meeting was a section devoted to the consideration of social evils, presided over by Dr. Helen Macmurchy, herself an authority on such matters. This meeting was instructive as an object lesson on the intense interest now being evinced in social subjects by all sorts and conditions of men and women. In the discussions, business men, lawyers, dentists, nurses, ministers of all persuasions took part, and gave their views with regard to the best methods of preventing social misery.

The programme of the meeting was so full that it would be impossible to even consider briefly the various points dealt with. With respect to the

Purification of Water Supplies,

and of Toronto water supply in particular, Dr. Bryce delivered himself of the opinion that as an old chemist he could not see how hypochlorite of lime was going to destroy the pathogenic germs in the sewage. To his way of thinking, it should not be called hypochlorite treatment but hypocrisy. Hypochlorite of lime is now used most extensively on this continent for purifying water and sewage. It does not appear to be regarded as an emergency treatment for water, but oftimes as a routine treatment. In Toronto, for instance, it has been now used for a considerable time. It was said that when the filtration plant was completed its use would be discontinued. The filtration plant should be finished, and in fact as far as the contract is concerned is finished, but it has been found that it is not large enough, and an addition will have to be made. Thus it is likely that hypochlorite of lime will be employed until the filtration plant can supply all the water needed by Toronto for domestic purposes. The public and most medical men think that hypochlorite should only be used in emergencies, as it frequently gives an unpleasant taste to the water, but many American public health men appear to be of the opinion that with its use the need for filtration is almost obviated. This is somewhat of a burning question at the present time.

In the section of

MILITARY HYGIENE,

Colonel G. Carleton Jones, P.A.M.C., Director-General Medical Service, Canada, read an excellent paper on the sanitation of a besieged city, and Major Lorne Drum read a paper on the Militia as a factor in public health.

Among other papers of note read were two on the prevention of tuberculosis by Drs. J. H. Elliott and G. D. Porter, of Toronto. At the closing session two important resolutions were passed. The first was to urge upon the Dominion Government the need for the establishment of a National Department of Health. The second was to the effect that a committee be appointed to draw up a memorial to be presented to the Dominion Parliament that it is against the interests of public health that raw sewage be permitted to discharge into waters which are used as the sources of water supply; that it is the conclusion of the Canadian Public Health Association that an Act regulating the pollution of streams is required in order to strengthen the hands of provincial authorities; that the Committee have power to draw up said memorial, and present to Parliament all available evidence and data bearing upon the prevention of the pollution of waters which are, or may be, used as sources of water supply.

Dr. J. W. S. McCullough, Chief Medical Officer of Ontario, was elected president, and Regina, Saskatchewan, was selected as the next place of meeting. The Executive Committee is as follows:—The President, the Secretary, Major Lorne Drum, Ottawa; the Treasurer, Dr. G. O. Porter, Toronto; Professor John Amyot, Toronto; Col. G. C. Jones, Ottawa; and Dr. C. A. Hodgetts, Ottawa. Just at the conclusion of the meeting the mournful announcement was made that Mrs. Starkey, wife of the first President of the Association, Dr. T. A. Starkey, Professor of Hygiene at McGill University, Montreal, had died somewhat suddenly. Most of the medical men present knew Dr. Starkey, appreciated his knowledge, and liked him for his social qualities, and for these reasons sympathised with him in his great loss. Some, like the writer, had known Mrs. Starkey, had partaken of her hospitality, and had fallen under the sway of her kind and lovable nature; these sympathised with Dr. Starkey more deeply by far. The Association passed a resolution conveying the sympathy of its members to Dr. Starkey. The city of Toronto gave the members of the Association a hearty welcome. Sir Edmund Osler gave an at-home in their honour, while Lieut.-Colonel and Mrs. E. Goodenham gave a musicale in their honour. The annual dinner was held at McConkey's Restaurant, when some eloquent speeches were made. Thus the meeting was a success from all standpoints.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Inaugural Address by Professor Lorrain Smith.

Professor Lorrain Smith formally entered on his duties on October 9th, by delivering his inaugural address to a large gathering of students and others in the M'Ewan Hall, Edinburgh. In introducing the new professor, Sir William Turner paid a tribute to the retiring incumbent of the chair. Professor Greenfield, after thirty years of active life in the University, had asked leave to retire. He had had double duties and double responsibilities, for not only had he taught pathology, but he had also acted as a clinical teacher in the Infirmary, and had discharged these duties with assiduity. It was evident that a new professor of pathology must devote himself wholly to that subject, hence, when the curators had to fill the chair they did not need to take into consideration the power of teaching clinical medicine, but had to look for someone competent to teach pathology in the wide sense of the term, and they considered that they had found the right man. Professor Lorrain Smith had, as an arts student, gained one of the great prizes of the Scottish universities—a Ferguson scholarship. The subject was philosophy, so that he began to study medicine with a wide outlook. Soon he obtained the Professorship of Pathology in Queen's College, Belfast, and later in the University of Manchester, whence he came to them.

Professor Lorrain Smith, before beginning his address on the

PLACE OF PATHOLOGY IN THE MEDICAL CURRICULUM,

recalled the impressions made on him as a student by his old teacher, Professor Greenfield. In paying a personal tribute, he felt sure that his words were endorsed by the many pathologists in this country who were his pupils. The purpose of Professor Smith's address was to show the essential unity of pathology and medicine. He described the state of matters before 1831, when the chair which he now occupied was founded. Then pathology was taught by the physician, just as at a still earlier date physiology also had been. When once pathology had come to be recognised as a separate science it grew enormously—it grew in three directions, along histological, chemical and bacteriological lines. At present it was suggested in some quarters that histology had told us all its story, yet who could deny that the introduction of a new method might at any time lead to still further advance in this direction? Chemical pathology proceeded largely by experiment, and though from its great complexity progress was slow, it was opening up fresh avenues of knowledge daily. In its present state, the complaint was sometimes made that pathology was too remote from practical medicine. In order that it might come to its proper place he pleaded for a synthesis, bringing clinical medicine and pathology into closer touch. He concluded by showing that pathology only advanced by research. While he did not urge any special claim for pathology in comparison with other medical sciences as a field for research, the intimacy of the connection between it and clinical medicine made it easier for a man whose chief interest was practice to undertake research in pathology. Modern pathology was an experimental science, and anyone who desired to be really abreast of it must give himself to research.

Inclusive Fees in Scottish Universities.

A conference of representatives of the General Councils of Edinburgh, Glasgow and Aberdeen Universities to discuss this question was held in Perth on October 5th. It was agreed to recommend inclusive fees in engineering and agriculture, in each case, of sixty guineas. After considerable discussion concerning the imposition of an inclusive fee in medicine the Conference agreed on the following resolution:—"That, having considered the memorandum of resolutions adopted at the conference of representatives of the University Courts of St. Andrews, Glasgow and Aberdeen on June 20th, 1912, and the report of the sub-committee of the General Council of the University of Glasgow, the conference finds that, while not opposed to the principle of an inclusive fee for University courses in medicine, further inquiry is necessary into the amount of the fee and into the form the regulations must take to protect the interests of the extramural schools."

Vital Statistics of Scotland.

In his report for the year 1910, just issued, Dr. J. C. Dunlop gives as the most noteworthy features of the vital statistics the lowness of all the principal rates—birth rate, marriage rate, death rate and infantile mortality rate are all below the average. The birth rate, 26.19 per 1,000 is the lowest yet recorded; the marriage rate, 6.52 per 1,000 is the seventh lowest; the death rate, 15.26 per 1,000 is again a record; while the infantile mortality rate, 108.3 per 1,000, though .6 above 1909, is unusually low. In all the years since 1855 there have only been three lower—1859, 1879 and 1909. The death rate from phthisis (115 per 100,000) continues to decrease; in 1860 and 1870 it was as high as

283, and until 1886 was constantly over 200. Among other diseases with lowered death rates are typhoid, whooping-cough, cerebro-spinal meningitis, pneumonia and bronchitis. Among high death rates are measles, scarlet fever and cancer. The last is now fully 25 per cent. higher than 10 years ago, 60 per cent. higher than 20 years ago and 100 per cent. higher than 30 years ago. How much of the increase is due to increased prevalence and how much to improved diagnosis, is doubtful. As regards the lowered birth rate, it is shown that until 1893 the birth rate was over 30; between 1894 and 1904 it ranged from 29.06 to 30.36; since 1905 it has steadily declined, being between 28 and 29 in the years 1905, 1906 and 1908, and between 27 and 28 in 1907 and 1909. The excess of births over deaths for the year amounts to 51,791, 2,210 less than the mean of the preceding 10 years. Legitimate children numbered 115,010, and illegitimate 9,049—a ratio of 7.29 per cent., which is practically the same as in 1909. For many years this percentage was a decreasing quantity, but during the last five years this has not been the case. From 1859 to 1873 it was constantly above 9; from 1874 to 1888 it varied between 8 and 9; from 1889 to 1897 it was between 7 and 8; from 1898 to 1907 it was below 7. Since then it has only twice been below 7, and thrice above it.

BELFAST.

The Salaries of Medical Officers.—Several Boards of Guardians in Ulster have been discussing the question of graded salaries for their medical officers during the past week, among them being the Ballymoney, Clogher and Lurgan Boards. In most cases the matter is still under discussion. To the disinterested onlooker the discussions are often amusing, specially the wild statements made as to the "riches" of the medical officers, but to those involved there cannot be much joke. On the whole, however, there seems to be a more reasonable spirit in the Boards than was the case a little time ago, and the fact that the profession have combined in face of the Insurance Act is not without its moral effect. At Lurgan the local Government Board Inspector, Dr. O'Brien, attended the meeting and gave some interesting particulars as to the cost of medical relief. In Lurgan the cost of treating dispensary patients per 1,000 of the population was £14, in Ballymena £17, Newtownards £17, Lisburn £17, Banbridge £19 and Newry £23. It is a pity that the cost in a few towns outside Ulster was not added. The cost of each ticket issued varies from 1s. 8d. in Lurgan to 3s. 9d. in Lisburn and 4s. 1d. in Newry. Dr. O'Brien said that he thought the medical officers at Lurgan were justified in asking for an increase in salary, but after long discussion it was refused. One argument against an increase was that some time ago when there was a vacancy in Portadown dispensary, though only £80 was offered (the miniumu proposed by the Committee being £100) four doctors applied for the post.

Care of Children's Teeth.—The versatile Provost of Trinity College has appeared in a new *rôle*, as a popular lecturer on hygiene. Last week in the Orange Hall at Bushmills, Co. Antrim, he gave a lecture on the "Treatment of Children's Teeth," the chair being taken by Dr. David Huey, J.P. The Provost stated that to extend medical inspection of school children to Ireland, as carried out in England, would cost over £40,000 a year, and instead of this the Treasury had now doled out £7,500. At first it was only intended to use this money in the large towns, but he had got an important concession for rural districts, and if they formed committees, and formulated workable schemes and raised a local fund, they would receive an amount equal to that fund, to be added to it. An experiment had been instituted by Lord Gough in Galway, but unfortunately was stopped by the Land League. He suggested the formation of a committee and a local fund in Bushmills, and this having been approved of, subscriptions amounting to £30 from four local gentlemen were announced, which will no doubt be increased by many smaller contributions. The further progress of the movement will be watched with interest.

Motor Accident.—Dr. R. A. Crawford, medical officer of Castleshane dispensary district (Co. Monaghan) has sustained severe injuries by a fall from his motor bicycle, which collided with a dog. His injuries were attended to by Dr. J. Campbell Hall of Monaghan, and he is progressing satisfactorily.

MANCHESTER.

The Chair of Obstetrics and Gynæcology.

Professor Archibald Donald who has been appointed to the Chair of Obstetrics and Gynæcology left vacant by the death of the late Sir W. J. Sinclair, opened the winter session of his class on Friday, October 11th, with a short history of the chair of which he is the fourth incumbent. The first Professor of Midwifery and Diseases of Women in Manchester was John Thorburn, a man of wide knowledge and of broad sympathies, who founded the Southern Hospital for Women and Children, and who taught there and in the Owens College until his death in the year 1885. He was followed in the chair by Cullingworth, who only retained it until he went to London in 1888. Of him it might be said that he did more for gynæcology between 1885 and 1900 than any man in the country, with the single exception, perhaps, of Mr. Lawson Tait. When Cullingworth went to London (St. Thomas's Hospital) his views on pelvic infection for example were new and entirely heterodox, and it was only after persistence in the face of strong opposition that he lived to see them generally accepted. The third holder of this professorship was William Japp Sinclair, who occupied it from 1888 until he died on August 21st, 1912. Those who had only known him recently, when his powers were impaired by failing health, could have no idea of the intellectual force of his earlier work. The North of England Gynæcological Society and the Journal of Obstetrics and Gynæcology of the British Empire, both of which he founded, remained as memorials to his organising ability. The part he played in bringing about the amalgamation between the Southern Hospital and St. Mary's showed him capable of sacrificing personal considerations for the public good. The Southern, where he taught, was a small hospital; St. Mary's was a large institution, and its clinical material was largely wasted because it was not connected with the University. Sinclair favoured the amalgamation though it reduced him from being supreme in a small hospital to being one of several in a large one.

Perhaps Sinclair's main personal characteristic was his enthusiasm. He was a great fighter and keen in controversy, but he always fought for principles, never for personal aims. His advocacy of the Midwives Act, for example, made him many enemies and doubtless injured his practice. But he continued to advocate the training and education of midwives, and acted for several years as a member of the Central Midwives Board, while many who had opposed him came to see that his motives had been pure and his objects high throughout. He was aided in his battles by the gift of literary style. This often enabled him to bring opponents into sympathy with his aims even when they could not agree with his views. Sinclair was kindly and considerate to the poor, and his treatment was always designed with the intention of saving his patients pain. His private life was worthy of all esteem and socially his was a most attractive personality. The strenuous career he led was the one which suited him, and now he rests in peace.

Probate to the wills of two medical men was granted last week. In the case of the late Dr. Thomas Gardner, of Bournemouth, estate of the gross value of £13,994 was proved, of which £8,485 is net personalty; Dr. Reginald E. Thomson, F.R.C.P., of Chelsea (retired), left estate of the gross value of £7,195, of which the net personalty was sworn at £7,058.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE POSITION OF DENTISTRY.

To the Editor The Medical Press and Circular.

Sir,—Recognising my position of detachment from general practice, you will not, perhaps, be surprised to learn that I am not a regular reader of medical journals, and have only to-day seen the copies of your excellent paper containing the articles and letters on "The Position of Dentistry." My old teacher, "A Hospital Dentist," who alludes to me in his letter to you on September 18th, has called my attention to this matter. My case is typical of many more. After a public school education, I began at 18 my dental and medical studies. I had a turn for mechanics. My advisers and I recognised that to be a good operator was the *sine quâ non* of a successful dentist, and the time taken up in qualifying as a mechanic, a dentist, and a medical practitioner occupied quite seven years. At about 25 I was in a position to earn some money for myself, but looked too young for any position above an assistantship. After a few years in this position, I began practice in a small town. The inhabitants, including those around served by it, numbered about 30,000. There were already six qualified dentists in the place. I succeeded a recently deceased practitioner. Immediately on his death his two mechanics started in practice. I enclose samples of their advertisements and circulars. They are unqualified. As you see, they each state that they were so many years with the late Mr. ————, "surgeon dentist," and that they perform all the operations of dentistry, etc. They do not exactly style themselves "Dentist" or "Surgeon Dentist," the only thing the Act forbids, but they use language which makes even educated people take them for legally qualified practitioners. They circularise and tout for practice with great activity. I send also some sample advertisements from local papers of the three firms of travelling quacks who visit the town weekly or bi-weekly. They offer "American and English Dentistry," etc. They issue pamphlets freely by post throughout the neighbourhood. Such practices are impossible by any self-respecting qualified man, even if he were not prevented from adopting them by professional law and the General Medical Council. We have to compete with this unqualified practice, carried out, as you explain, under false pretences; and we have to endure the discomfort or odium of being ranked with these sordid tradesmen or unscrupulous quacks. It is bad for us; it is worse for the public. Of the latter fact I could give scores of illustrations; if you will allow me, I will end with two within my recent experience. A middle-aged lady is sent to me by a local doctor. She is suffering from chronic rheumatoid arthritis, suspected to be of septic origin. Examining her mouth, I find a large upper denture, a roughly made vulcanite frame holding six front and some back teeth. All the decayed roots are left beneath, and the plate is mainly held up by two silver pegs or pivots, which pass up the root canals of the canine teeth. These canals are full of putrid particles, and cannot be kept clean, whilst pus is oozing more or less freely from the alveoli of nearly all the other broken-down necrosed stumps. The lower front teeth are covered with a mass of foul tartar overlying the gum—a nest of septic putrefaction. Not the slightest attention had been given by the quacks to these conditions of disease; their aim, in which they succeeded, was to get a big fee—in this case it was £12—for a piece of work costing them a few shillings. It is, of course, more than probable that the broken health, and, consequently, shortened life of this patient may be ascribed to this malpractice. The second case is that of a girl of 12, taken by her mother to an "American" firm who, among other things, profess to "regulate children's teeth" by methods superior to those of other practitioners. This child had protrusion of the upper incisors, due to a well-known malformation of the jaw. She was wearing a vulcanite frame covering all the back teeth, and having a wire across the faces of the incisors. It could have no effect whatever on the deformity. It kept the teeth constantly exposed to the acid decomposition of food *débris* under the plate, and all these teeth were badly affected with caries in consequence. In both these cases an action for damages for malpractice might be brought, but there is no one but myself to suggest it, and it would only need to be put by counsel to an enlightened jury, that a rival practitioner was the instigator, to make certain of a verdict, with costs, for the defendant.

I enclose my card; you will, I trust, agree that no obligation calls for the disclosure of my name, and I beg to subscribe myself,

Yours truly,
October 9th, 1912. A Country Dentist.

To the Editor of The Medical Press and Circular.

Sir,—I was much interested in the reply that "A Hospital Dentist" makes to my letter published in your issue of the 25th September. Your correspondent does not make the position at all clear on the vital point at issue, namely, whether he merely wants an amending Act, whereby unqualified dental practitioners will not be able to use any description after their names which might mislead the public to imagine that they were qualified by examination, or whether on the other hand he wants an Act absolutely prohibiting the practice by unqualified men. By his remark, in which he seeks to draw an analogy from the legal profession, to the effect that "it is absolutely impossible for an unqualified man . . . to practise as a solicitor under any pretence of any kind," it would seem that he is aiming at total prohibition; but by the preceding sentence, where he refers to the Dental Acts being specially designed to enable the public to distinguish between legally qualified and unqualified practitioners, it would seem that he is simply aiming at a defining Act. Now a gentleman who seeks to champion the cause of his profession in an important medical paper, should have clear ideas on the subject on which he writes before endeavouring to instruct other people. Let me at once say that there are few, if any, respectable unregistered dentists who would resist a legal designation defining there position *vis-a-vis* to the qualified men. If on the other hand it is thought to prevent the unregistered men from practising altogether, I say again it is crying for the moon.

Your correspondent does not attempt to answer my contention that the number and the charges made (and necessarily made) by qualified men render them unable to supply the dental needs of the poorer classes of the community. The poorer classes of the community, however, are the large majority of the British nation. Your correspondent, "A Hospital Dentist," may imagine that he is living in the mid-Victorian period, but this is the 20th century, and he and those for whom he writes will have to answer to Parliament the simple question as to how they propose to supply the dental needs of this vast class of the community at present supplied by the 25,000 *bona fide* but unregistered practitioners. There is only one way out that I can see, and that is a State Dental Service on a gigantic scale, which to the extent of 80 or 90 per cent. would have to be supported by the tax-paying and rate-paying classes. Which alternative does he advocate? Like the hero in melodrama, I pause for a reply.

I am, Sir, Yours truly,
An Interested Observer.

GAS FIRES AND VENTILATION.

To the Editor of The Medical Press and Circular.

Sir,—It is very important that gas fires should only be used in sitting-rooms and bedrooms when it is clearly proved that there is an up draught in the chimney, so as to carry off the poisonous vapours generated by the combustion of gas.

A few weeks ago my daughter went to see a friend in rooms just off the Strand, where the heating was entirely supplied by gas fires. As she had to wait some time she lit the fire, and sat down to read. When the friend arrived my daughter was found lying unconscious in the arm-chair, and for some hours there was much anxiety in restoring her breathing and circulation. I have devoted a great deal of attention to the question of the ventilation of gas fires, and have no hesitation in saying that the *Daily Telegraph*, in its recent article on "The Domestic Economy of Coal Gas," is not correct in stating that "medical testimony has disposed of the old objection that a gas-fire contaminates the air. . . ."

I am, Sir, yours truly,

R. L.

OBITUARY.

DR. R. LAING, OF BLYTH.

BY the death last week of Dr. Robert Laing, the town of Blyth has been deprived of its oldest medical practitioner and one of its most worthy citizens. The deceased, who was 68 years of age, was the son of the late John and Mary Laing, formerly of Jesmond. He studied at the University of Durham, receiving no less than seven medals in various subjects. In 1869, he became L.R.C.P. and L.M.Edin., and M.R.C.S.Eng. He took the D.P.H.Camb. in 1889. Dr. Laing was the Medical Officer of Health for the Cowper Urban District until, a few years ago, that authority was amalgamated with the Blyth Council. He was a county justice for Northumberland, and as such was a regular occupant of the Blyth Bench. He was formerly Prosector of Anatomy at the Newcastle-upon-Tyne College of Medicine, and he was a medical inspector under the Factory Act, in addition to being Surgeon to the Cowper Coal Company.

DR. F. H. LOW.

WE regret to announce the death of Dr. Frank Harrison Low, of 13 Wimpole Street, W., which took place on the 8th inst, after a few days' illness, at his residence, Heath Bank, Blackheath Rise, at the age of 58. The deceased, who qualified as L.S.A. in 1875, became M B., C.M.Aberd. and M.R.C.S.Eng. in 1876, studying at King's College, London, and the University of Aberdeen. He was well known as a medical radiographer, being Medical Officer to the X-ray Department at the London Medical Graduates' College and Polyclinic, having previously occupied a similar post at King's College Hospital and at the Paddington Green Childrens' Hospital. Dr. Low was Honorary Secretary of the Roentgen Society, and he was a Vice-President of the West London Medico-Chirurgical Society. He had formerly held appointments in Hammersmith as Medical Officer to the Homes for the Aged Poor and Divisional Surgeon to the Metropolitan Police.

MEDICAL NEWS IN BRIEF.

The Irish Local Government Board and the Sanatorium Benefit.

ON behalf of the Local Government Board, Mr. E. Bourke, member of the Board; Dr. E. Coey Biggar, Medical Inspector; and Mr. C. H. O'Connor, General Inspector for Dublin, received a deputation of the Dublin Joint Committee charged with the administration of Insurance Act Sanatorium Benefits, when representations were made as to the L.G.B.'s prevention of "home" sanatorium treatment in cases where tuberculosis patients could not be sent to sanatoria.

The Joint Committee have been administering "home" treatment since last July through the Samaritan Committee of the Women's National Health and other philanthropic organisations considered to classify as "institutions" for the purpose of the Act. The L.G.B. now refuses to recognise this procedure, although the Insurance Commissioners declined to decide the point.

Question of Funds.—Admitting that the domiciliary treatment would be useless without food, etc., the L.G.B. representatives said it was doubtful that the Act empowered this, and, even if it did, they feared the funds available would not be sufficient. They advised the Committee to send a few urgent and most desirable cases only for treatment to sanatoria, as they admitted that, if all the cases attended by the Committee were sent the cost would be much greater than under the present system.

The Committee asked that the present procedure be allowed temporarily until March 15th next, when they would be in a position to see how the cost worked out and how the funds would be affected.

This request is to be formally submitted by the Committee to the Board for consideration.

The deputation consisted of:—Her Excellency the Countess of Aberdeen, Ald. Dr. M'Walter, Councillor Wm. M'Carthy, Dr. Rowlette, and Miss Gargan.

The Hospital Saturday Fund.

THE annual metropolitan collection under the auspices of the Hospital Saturday Fund was made on Saturday last throughout London. Since 1897 the street collections have been abandoned, and the collections have been made in boxes distributed in banks, business houses, and shops during the fortnight ending on Hospital Saturday. Special help was given this year by the theatres and picture palaces, collection boxes being displayed in the vestibules and in other cases being carried round among the audiences during the performances. Several railway companies arranged for collections on the station premises.

The total amount paid into the fund through the various committees and the general fund in 1911 was £45,468, but Mr. Davis, the Secretary, stated last week that it was expected that the amount would this year be less owing to the Insurance Act. Up to midsummer the income was nearly £600 greater than that for the corresponding period last year, but the July, August, and September returns showed the loss of this lead of £600 and an additional loss of £200. This period corresponds with the beginning of the operations of the Insurance Act, and Mr. Davis said it was noticeable that the penny weekly subscriptions on the cards of many factories and workshops began to fall off directly the contribution cards of the Insurance Act were in use.

The Rebuilding of the Chelsea Hospital for Women.

THE Council of the Chelsea Hospital for Women, Fulham Road, are appealing for funds to rebuild the institution. The present space is altogether inadequate, so that there is a long waiting list and the want of sleep from which patients suffer after their operations makes removal from the noise of the motor traffic urgent.

Lord Cadogan has presented the Council with a site for rebuilding the hospital in a quiet street near by; the trustees of the Zunz Bequest have promised £10,000; and it is reported that the chairman of the hospital, Mr. T. Dyer Edwardes, is willing to forego his mortgage of £4,000 on the present building and freehold site so that they may be sold unencumbered; but a sum of £30,000 is still required. A dinner in aid of the funds will be held on November 20th at the Savoy Hotel, at which the President, Lord Castlereagh, and his sister, Lady Ilchester, who is President of the Ladies' Committee, will jointly preside. The Queen has contributed £21. Lady Esher has collected £500, Mrs. Hugh Fenton £200, the Prudential Assurance Company 50 guineas, and the London County and Westminster Bank £20.

Further donations will be received by the Hon. Acting Secretary, Mr. S. Hoffnung-Goldsmid, or by the Secretary, Mr. Herbert H. Jennings, at the Hospital, Fulham Road, S.W.

Peamount Sanatorium, co. Dublin—Action for Injunction.

It is stated that a number of owners of the lands adjoining those on which the proposed Peamount Sanatorium is situate are taking steps with a view to asking for an injunction in the Chancery Division to restrain the trustees from using the premises as a Sanatorium for persons suffering from tuberculosis. The defendants named are her Excellency the Countess of Aberdeen, the Right Hon. Sir David Harrel, Right Hon. L. A. Waldron, Right Hon. M. F. Cox, and Mr. William M. Murphy. It is stated also that unexpected difficulties have arisen as to the water supply of Peamount, and that the Local Government Board has refused to sanction further expenditure until they are satisfied that a water supply is secure.

Royal College of Surgeons of England—New Diplomates.

At a meeting of the Council of the College on Thursday last, the following candidates, having passed the required examinations, were admitted members of the college: Narayan K. Bal, Bombay Univ. and Middlesex Hosp.; Crawford C. Marshall, Melbourne Univ. and Middlesex Hosp.; Jivraj N. Mehta, Bombay Univ. and London Hosp.; John Saner, Cambridge Univ. and Guy's Hosp.; Willi C. Toll, Toronto Univ. and Middlesex Hosp.; John Ward, Manchester Univ. and Middlesex Hosp.

Arthur L. Robinson, M.B.Lond., M.R.C. L.R.C.P., of Liverpool Univ. and University Colle Hosp., was admitted a Fellow of the College.

The following candidates, having fulfilled the r quirements of the dental and surgical sections of th Board of Examiners in Dental Surgery, were admitte Licentiates: Oswald G. Aylen, Birmingham Univ.; Gi bert J. S. Rose, Middlesex and National Dental Hosp. and George L. Venning, Middlesex and Nationa Dental Hosp.

London Hospital Medical College.

In connection with the London Hospital Medical College the following scholarships have been awarded for the winter and summer session 1911-12:—

Price Scholarship in Science (£100), Mr. R. G. Simpson; Price University Scholarship in Anatomy and Physiology (£52 10s.), Mr. W. D. Newcomb, of Trinity College, Cambridge, and Mr. A. C. Ainsley, of Caius College, Cambridge, æq., scholarship divided; Entrance Science Scholarship (£50), Mr. V. J. F. Lack; Epsom Scholarship (£126), Mr. S. H. de G. Pritchard; Buxton Scholarship in Arts (£31 10s.), Mr. H. L. Douglas and Mr. S. E. Harvey, æq., scholarship divided.

Royal Academy of Medicine in Ireland.

The annual meeting of the Academy was held last Friday. The report stated that during the past year the number of Fellows was 169, Members 27, and Associates 3. The total attendances at the meetings were 656, which is considerably less than the number (817) reported last year. The accounts have been audited, and show a balance to credit of the Academy of £261 2s. 8d. At the request of the University of Dublin the Academy was represented at the Bicentenary Celebration of the School of Physic, and an address of congratulation was presented; and in connection with this occasion a number of Honorary Fellows were elected by a special meeting of the Academy. The Council reports the loss to the Academy through death of the Rt. Hon. Lord Lister, F.R.S., Sir Thornley Stoker, Bart., M.D., F.R.C.S., David Baldwin Jacob, M.D., F.R.C.S., Robert John Montgomery, M.A., M.B., F.R.C.S.

The elections of officers and Councils resulted as follows:—

President: Walter G. Smith.

General Secretary: J. Alfred Scott.

Secretary for Foreign Correspondence: Sir John Moore.

Medical Section.—President: J. F. O'Carroll; Council: James Craig, H. C. Drury, J. A. Matson, Sir J. Moore, T. G. Moorhead, G. Peacocke, F. C. Purser, E. J. Watson, and W. A. Winter.

Surgical Section.—President: R. D. Purefoy, F.R.C.S.; Council: C. A. Ball, Alex. Blayney, L. G. Gunn, W. S. Haughton, W. Pearson, Seton Pringle, R. A. Stoney, E. H. Taylor, W. I. de C. Wheeler, and R. H. Woods.

Obstetrical Section.—President: A. J. Horne; Council: Gibbon FitzGibbon, M. Gibson, A. N. Holmes, F. W. Kidd, T. Neill, R. D. Purefoy, J. Spencer Sheill, Alfred Smith, B. A. Solomons, and E. H. Tweedy.

Pathological Section.—President: A. H. White; Council: A. H. Benson, William Boxwell, L. G. Gunn, W. G. Harvey, E. J. McWeeney, T. G. Moorhead, T. T. O'Farrell, W. D. O'Kelly, R. J. Rowlette, and A. E. Wynne.

Section of Anatomy and Physiology.—President: B. J. Collingwood; Council: A. F. Dixon, A. C. Geddes, T. P. C. Kirkpatrick, A. A. McConnell, and E. J. McLoughlin.

Section of State Medicine.—President: M. J. Nolan; Council: A. E. Boyd, W. M. Crofton, W. R. Dawson, T. P. C. Kirkpatrick, J. A. Matson, and W. A.

a prize in money (£5) and a silver medal as a memorial to the late Dr. Savill will be awarded in July, 1913 and yearly to the student (of either sex) at the West End Hospital for Nervous Diseases, who shall make the best *viva-voce* examination in diseases of the nervous system, in addition to writing a thesis on a subject approved by the examiners. All students (qualified or unqualified) who have attended at the hospital not less than 25 times are eligible. A triennial lecture will also be given, to be called "The Savill Lecture," at the Hospital referred to.

University of Oxford.

In a Congregation held on October 10th, the following degrees were conferred:—M.Ch., H. S. Souttar, Queen's; B.M., N. S. Lucas, New College.

Bequest to the Bethlem Royal Hospital.

The late Mr. Joshua Vardy, of Portsmouth, formerly surgeon to the Royal Portsmouth Hospital, whose will was proven last week, left estate of the value of £22,236. He bequeathed £1,000 to the Bethlem Royal Hospital "as a thankoffering in recognition of the very kind treatment and care bestowed upon my brother, the late Samuel Provis Vardy, during his long stay there," and directing that this sum should be used by the governors of that institution as they in their sole discretion may think fit, "in furtherance of this noble institution." He also bequeathed £50 to the Royal Portsmouth Hospital, and the remainder of his property for equal division between thirty cousins and second cousins.

Edinburgh University—Public Health Diplomas.

The following candidates, having passed the requisite examinations of the Royal College of Physicians of Edinburgh, Royal College of Surgeons of Edinburgh, and Royal Faculty of Physicians and Surgeons of Glasgow, in October, were last week admitted Diplomates in Pubic Health:—Edward L. Middleton, Alexandra B. MacCallum, John D. Ingram, John C. MacCallum, Dewan Jai Chand, William G. Macdonald, Jane H. M'Ilroy, George C. Strathairn, Daniel C. Adam, Alexander J. Ewing, George V. T. M'Michael, and Peter Allan.

NOTICES TO CORRESPONDENTS, &c.

☛ **Correspondents** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Original Articles or Letters intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

Contributors are kindly requested to send their

odes, 20 cestodes, and 16 trematodes.

Dr. F. P. (London).—We are of the opinion that metal scrapers and wire mats are preferable to fibre mats for school purposes, or, indeed, for the main entrances of any public building.

CARBOLIC ACID A SECTION 5 POISON.

It is stated upon reliable authority that the Privy Council will shortly place liquid preparations of carbolic acid and its homologues containing not more than 3 per cent. of these substances within the category of those governed by Section 5 of the Poisons and Pharmacy Act, 1908. In other words, they will be required to be sold retail in vessels distinguishable by touch, labelled "Poisonous—not to be taken," and bear the name and address of the seller in the same way as mineral acids and caustic alkalies.

Mr. S. Hope (Purley).—One of the latest springs possessing the property of radio-activity is the ancient hotwells spring at Clifton, the water of which has been recently stated to contain an amount of radium emanation equal to an activity of 0.93 milligrams of radium in 1,000,000 litres.

Meetings of the Societies, Lecturs, &c.

Wednesday, October 16th.

Royal Microscopical Society (King's College, Strand, W.C.).—8 p.m. to 11 p.m.: Conversazione.

Thursday, October 17th.

Royal Society of Medicine (Dermatological Section) (1 Wimpole Street, W.).—5 p.m.: Cases by Dr. Walsh, Mr. McDonagh.

Child Study Society, London (Royal Sanitary Institute, 90 Buckingham Palace Road, S.W.).—7.30 p.m.: Dr. T. P. Nunn: Psychological Development of the School Subjects.

Friday, October 18th.

Royal Society of Medicine (Otological Section) (1 Wimpole Street, W.).—5 p.m.: Dr. Dundas Grant: Presidential Address—Otological Discussions: Matter and Method. Cases and Specimens by Mr. R. Lake, Arthur Cheatle, Dr. Dan McKenzie, Dr. W. Milligan, Mr. Macleod Yearsley and others.

Royal Society of Medicine (Electro-therapeutical Section) (1 Wimpole Street, W.).—8.30 p.m.: Introductory Address by the President, Dr. R. Morton.

Society of Tropical Medicine and Hygiene (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Report Resignation by Dr. W. Carnegie Brown of his Post as Joint Secretary of the Society, and move a Resolution thereon.—The President (Sir William Leishman): The Etiology of Blackwater Fever (followed by a Discussion).

Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.).—5 p.m.: Prof. Keith: Demonstration on Specimens Recently Added to the Collection of the College Museum.

Appointments.

Cumberbatch, E. P., M.B., B.Ch.Oxon., M.R.C.P., Medical Officer in Charge of the Electrical Department at St. Bartholomew's Hospital.

Elmslie, R. C., M.S.Lond., F.R.C.S.Eng., Orthopædic Surgeon to St. Bartholomew's Hospital.

Fenwick, D. E., M.B., Ch.B., House Physician at the Hampstead General and North-West London Hospital.

Hill, Isabel, M.B., Ch.B.Edin., Medical Officer for Women and Children at the Workhouse Infirmary, Darlington.

Irwin, S. T., M.B., M.Ch.Belf., F.R.C.S.Edin., Assistant Surgeon to the Children's Department at the Ulster Hospital for Children and Women, and Assistant to the Professor of Surgery at the Queen's University, Belfast.

McKerron, Robert Gordon, M.D.Aberd., Regius Professor of Midwifery in the University of Aberdeen.

Walsham, Hugh, M.D.Cantab., Medical Officer in Charge of the X-Ray Department at St. Bartholomew's Hospital.

Vacancies.

Corporation of Birmingham Fever Hospital.—Medical Superintendent. Salary £250 per annum, with board, etc. Applications to Medical Officer, Council House, Birmingham.

Surrey County Asylum, Netherne, Merstham.—Third Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

Bradford Royal Infirmary.—House Physician. Salary £100 per annum, with board, residence, and washing. Applications to J. J. Barron, Secretary-Superintendent.

Burton-on-Trent Infirmary.—House Surgeon. Salary £120 per annum, with furnished rooms, board, coal and light free. Applications to the Secretary, Mr. John Wood, The Infirmary, Burton-on-Trent.

Birkenhead Borough Hospital.—Senior House Surgeon. Salary £100 per annum, with board and laundry. Applications to the Secretary.

St. Mary's Hospital, London, W.—Junior Casualty House Surgeon. Salary £100 per annum, with board, and lodging. Applications to Thomas Ryan, Secretary.

Drumcondra Hospital, Dublin.—Ophthalmic Surgeon. Applications to the Registrar before October 26th. (See advt.)

Births.

Black.—On Oct. 10th, at Warrington Lodge, Warrington Crescent, London, the wife of Dr. Norman Black, of Singapore, of twin sons.

Briggs.—On Oct. 6th, at Grasmere, Hayesfield Park, Bath, the wife of Dr. Seymore Briggs, of a daughter.

Brown.—On Oct. 10th, at "Perrymead," Streatham, S.W., the wife of Dr. Thos. H. Brown, of a daughter.

Campbell.—On Oct. 8th, at The Copse, Larbert, Stirlingshire, the wife of Robert B. Campbell, M.D., M.R.C.P., of a son.

Hoskyn.—On Oct. 10th, at 69 Clifton Road, Rugby, the wife of Charles Reginald Hoskyn, M.B., B.S.Lond., of a son.

Sinclair.—On Oct. 8th, the wife of Dr. H. W. Sinclair, of a daughter.

Taylor.—On Oct. 7th, at 8 Melville Street, Edinburgh, the wife of Dr. Macrae Taylor, of a son.

Marriages.

Flowerdew—Mackworth.—On Oct. 4th, at Bombay Cathedral, Richard Edward Flowerdew, Captain Indian Medical Service, ninth son of Mr. and Mrs. Arthur J. Flowerdew, of Billingford Hall, Scole, Norfolk, to Caroline Jane, youngest daughter of the late Mr. and Mrs. Horace E. Mackworth, Bucksburn, Aberdeenshire, and granddaughter of the late Col. Sir Digby Mackworth, Bt., Glen Uske, Monmouthshire.

Gaskell—Eaden.—On Oct. 10th, at Little Shelford, Cambs., John Foster Gaskell, M.D., son of W. H. Gaskell, M.D., F.R.S., The Uplands, Great Shelford, to Margaret, daughter of John Frederick Eaden, of Little Shelford.

Ilott—Satterthwaite.—On Oct. 12th, at the Parish Church, Bromley, Kent, Dr. Cyril Herbert Thomas Ilott, only son of Dr. Herbert J. Ilott, of Bromley, to Lucy Annette, eldest daughter of Col. E. Satterthwaite, C.B., and Mrs. Satterthwaite, of Bromley, Kent.

Johnstone—Macassey.—On Oct. 5th, at St. Stephen's Church, Dublin, William Montagu Lucas Johnstone, M.B., High House, Newent, Glos., son of R. H. Johnstone, D.L., of Bawnboy House, Co. Cavan, to Evalyne Clara Livingstone, daughter of the late L. L. Macassey, M.Inst.C.E., and of Mrs. Macassey, 5 Wilton Place, Dublin.

Rooke—Moore.—On Oct. 8th, at the Parish Church, Chipping Barnet, Alfred Basil Rooke, F.R.C.S., of Bournemouth, youngest son of the late Alfred Bradley Rooke, and of Mrs. Rooke, of North Finchley, to Stella, youngest daughter to Mr. and Mrs. Edgar Richardson Moore, of Chipping Barnet.

Turner—Elgood.—On Oct. 9th, at St. Paul's Church, Avenue Road, N.W., Alfred Charles Turner, of St. Philip's Place, Birmingham, son of Charles Turner, of Hatch End, Middlesex, to Olive Muriel Elgood, M.B., M.S.Lond., youngest daughter of G. J. Elgood, J.P., of Aberdeen House, Adelaide Road, N.W.

Deaths

Dewes Fowler.—On Oct. 11th, at 12 Crescent Mansions, Notting Hill, Ursula Mary Dewes Fowler, M.D., daughter of the late Rev. Alfred Dewes, D.D., Vicar of St. Augustine's, Pendlebury.

Epps.—On Oct. 13th, at Wellgarth Road, North End, Hampstead, Washington Epps, M.R.C.S., L.R.C.P., youngest son of the late Dr. George N. Epps, aged 64.

Gibb.—On Oct. 9th, at Peking, James Glenny Gibb, aged 3½ years, elder son of the late Dr. James Glenny Gibb, who died last week, and grandson of the late James Gibb, of 51 Ladbroke Grove, London, W.

Low.—On Oct. 8th, at his residence, Heath Bank, Blackheath Rise, S.E., after a few days' illness, Frank Harrison Low, M.B., of 13 Wimpole Street, W., aged 58.

Wroughton.—On Oct. 9th, at Cardross, Scotland, William Charles Haultain Wroughton, L.R.C.P., M.R.C.S., late of Carlisle.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

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NOTES AND COMMENTS.

The Nobel Prize.

THE recent presentation of the Nobel prize to Dr. Alexis Carrell serves as a timely reminder of the great strides surgery has made in recent years with regard to the vascular system. Hearts can be sutured, slit or punctured blood-vessels sewn up by ligaturing a portion of their wall without blocking their lumen, cut vessels sutured end-to-end, arterio-venous anastomoses carried out in gangrene, portions of blood-vessels transplanted, and so on. Some of these wonders, it is true, have been demonstrated only upon the lower animals, but there is no reason to doubt that they can all be applied to man. That a great advance has been made thereby it is impossible to doubt. The treatment of aneurysm and of some kinds of atheroma, especially in the local form of the latter, may become amenable to the art of the surgeon. The *technique* of operative procedures upon the blood-vessels is necessarily of a difficult and delicate nature. One interesting feature is that the asepsis which suffices for abdominal operations falls short of the standard required for the successful suturing of blood-vessels. Even where union has been apparently ideal, there has been some lurking asepsis sufficient to block the lumen of the vessel.

Dr. Carrell's Field of Conquest.

DR. CARRELL, however, has pushed his discoveries to various practical applications that bid fair to have results of a kind that, if seriously mooted a few years back in the pages of a medical journal, would have suggested doubts as to the editorial sanity. Who would have believed it possible that a kidney could be taken out of one cat and transplanted into another, and that the latter would not only recover from the operation, but go on living contentedly with the aid of the substituted kidney? Yet that has been done by Dr. Carrell. The obvious inference is that one day diseased kidneys in man will be taken out and replaced by kidneys of the sheep or other animal, possibly of the monkey, which is next of kin to the genus *homo*. Could Baron Munchausen have imagined a prettier tale in his happiest vein of inspiration? But the matter does not end there; if one organ can be thus handled, why not another? Dr. Carrell may perhaps one day provide us with some direct surgery upon the valves of the heart. If a wounded heart can be stitched up and the patient recover, why should he not equally be able to withstand a deliberately inflicted surgical wound? Of a truth, it seems not remotely impossible that within the lifetime of the present generation we may hope to see the surgery of the valves of the heart placed on a sound footing as a recognised everyday operation.

Punishments that do not fit the Crime.

THE Report of the Prisons Commissioners may well give rise to misgivings in the mind of the thoughtful philanthropist. What is this " crime " for the commission of which we brand so many of our fellow-countrymen with the stigma of a degrading punishment? In the year 1911 no less than 128,539 persons were committed to prison for periods varying from a few days to a month. In a great number of cases they were sent to gaol in default of payment of a small money fine, a fact that emphasises the stupid folly of the proceeding. For a trifling offence a man who happens not to be able to command a few half-crowns wherewith to purge his crime is sent to prison. As a result, he probably loses his situation, and may not get another, while his wife and family may become chargeable to the Poor-law. The bargain for society is stupid in the extreme. Far better to spend money in feeding the destitute than a hundred times the amount in keeping them and theirs in prisons and workhouses. It would be far cheaper to the taxpayers to supply needy country folk with game bought at the poulterers than to pay for the support of all the persons directly and indirectly thrown upon the public funds as the result of offences against the Game Acts!

Quis Custodiet Ipsos Custodes?

IT is the chief duty, as we understand it, of the respective Local Government Boards of the three countries, to regulate and control the activities of the various local authorities. The Local Government Board for Ireland, like its sister boards, checks the extravagances of the local bodies, restricts their activities within legal limits, and occasionally stimulates them to the fulfilment of their statutory duties. Moreover, one of its greatest powers is that of surcharge for expenditure wrongfully incurred. However shy the Board may be to apply pressure for the promotion of the public health, it is never slow to exert its authority to surcharge. Unfortunately, there is no higher power which can surcharge the members of the Local Government Board, when, through neglect or ignorance, they squander the public funds. If there were, it would take several years' salary from the members of the Board to make good the sums lavished recently on the Peamount Folly. The Women's National Health Association, by the means of public funds, advanced from time to time on the authority of the Local Government Board, has erected a huge " sanatorium " at Peamount, on the borders of the counties Dublin and Kildare. When the institution was about to be opened for patients it was discovered that the question of a water supply had been overlooked. The nearest water suitable for drinking purposes is a well some two miles away, whence all water has to be conveyed by cart! We cannot for the moment recall any more scandalous instance of a Government Department playing fatuous ducks and drakes with public money.

LEADING ARTICLES.

THE MEDICAL ASPECTS OF THE GREAT WAR IN THE NEAR EAST.

AFTER an interval of comparative rest the problem known as the Eastern question has reasserted itself with more than wonted vehemence. Four kingdoms, namely, Bulgaria, Servia, Montenegro and Greece, have allied themselves in what bids fair to become a final struggle against the yoke of Mohammedan Turkey. The last-named country, fresh from a war with Italy, now finds herself faced with armed defiance from surrounding nations who have been under her suzerainty. It will be generally conceded that the position of Turkey has been brought upon herself by the cruelty and injustice of her government. She is now surrounded by armies that far outnumber her own, but the fighting qualities of the Turk render it unsafe to predict the issue of the fierce war which has now begun. Whether or not the great European powers will permit the fight to go on to the end it is equally impossible to foretell. As a medical journal, however, we are able to speak with confidence on certain aspects of the affair which touch the inner philanthropy of nations all the world over. The conduct of a war in which no less than five armies are concerned must necessarily entail a great loss of life and great sufferings to the sick and wounded. As a matter of fact, it is generally understood that the revolting nations are none of them properly supplied with a fully equipped and adequate army medical corps. Indeed, in the case of first-rate European powers it has always invariably been necessary to supplement the army medical arm by the aid of voluntary red-cross organisations. In the case of Turkey, Greece and the Balkan nations the need for special help in that direction is peculiarly great. Owing to the remoteness of the scene of conflict, to the mountainous nature of much of the ground to be traversed, to the uncouth and even semi-barbarous ways of some of the combatants, to their little-known language, and to other racial and religious factors, the task of rendering them aid is beset with unusual difficulties. Happily it is not the way with our countrymen to discuss details of that kind when lives are at stake. Already the British Red Cross Society has dispatched one well-equipped expedition to Montenegro under three surgeons. During the present week three complete units are being sent out to Turkey, each one consisting of three surgeons, three dressers and twelve orderlies. In addition three directors are being sent to the North Balkan States, Turkey and Greece respectively, their official duty being to look after the Red Cross interests in each area. Clearly, this provision barely touches the fringe of the actual requirements of the war. It is gratifying, therefore, to find that an English newspaper, the *Daily News and Leader*, has once again come to the rescue, and with noble enthusiasm is raising a fund in aid of the sick and wounded. As might be expected, the appeal for help has met with a prompt and generous response. An enterprise of this kind is costly, but there is little doubt that the fine previous records of British journalism in this direction will be maintained, if not surpassed. The approach of winter will render the campaign extremely arduous. Well may it remind us of the history of the sufferings of our own soldiers in the terrible Crimean campaign. Some of the fighting in the present outbreak has taken place round Scutari, a name that will ever be associated with our own history as the site of the hospital to which our sick and wounded were sent in the later stages of the war. Meanwhile, at any moment great pitched battles may be fought, and it is terrible to think what human sufferings may ensue owing to the want of adequate medical care and attention. Experience has shown that skilled medical men are always forthcoming in sufficient numbers, and all that remains is for a generous nation to provide the funds for which the *Daily News* is pleading with a kindly enthusiasm that must alike confirm its friends and disarm its opponents. The thing to think of for the moment is the picture of wounded and sick soldiers lying untended on bivouac and battlefield, and of what may be done to lessen the sufferings thus begotten of war—that great surviving link between reasoning man and his unreasoning brutish ancestor. Medical science—fair offspring of reason and humanity—is best fitted to assuage and mitigate the evils thus begotten of international hatred. Fortunately, the best modern skill of the surgeon and the physician is in this case available.

THE FRIENDLY SOCIETIES AND THE PUBLIC IN IRELAND.

IT is curious how apathetic the English public has remained in regard to the failure of the authorities to make terms with the medical profession for the working of the medical benefits of the National Insurance Act. The bullying tactics of the Chancellor of the Exchequer and some of his supporters, and the no less vulgar misrepresentations of some of the party journals, have alike failed to rouse any resentment against the profession for standing out for satisfactory conditions of service. The man in the street sees that it is a matter of business between the doctor and those who wish to employ him, and he stands aside to allow the bargaining to proceed undisturbed. In Ireland there is as yet no dispute between the authorities and the profession. The clauses relating to the medical benefit do not apply to Ireland, and there is no reason, either in the nature of things or in the finances of the Act, why the sanatorium benefit cannot be amicably worked. It is true that the Chairman of the National Insurance Commission, with singular impatience and with ignorance, not only of the demands of the profession, but of the terms of the Act it is his duty to administer, has attempted to create a feeling of irritation in the profession, and to mislead and excite the public, but it is to be hoped that his foolishness will not seriously impede arrangements, which, prior to his outbursts, were proceeding satisfactorily. In Ireland, however, there is a serious enough question at issue between the friendly societies and the profession, though it is not incapable as yet of friendly adjustment. The enormous increase of friendly societies, their sudden encroachment on the domain of private practice, and the fact that they are now State-aided, render it necessary that society work should no longer be regarded by the doctor as an exercise of his private charity. The contract between the medical officer and the friendly society must in future be a strict matter of business, fair remuneration being the return for adequate services. Recognising these facts, the medical profession in Dublin, Belfast, and elsewhere, has given due notice to the societies of the terms on which, after January 1st, 1913, members of the profession will be willing to accept society work. The friendly societies are, no doubt, seriously considering the problem, and very naturally have formed a union through which alone negotiations with the medical profession are to be conducted. This is quite right and businesslike, for organisation on one side is as desirable as on the other. The friendly societies' union, however, is apparently not confident of being itself able to conduct the business for which it has been established, for it is now attempting to rouse the public against what is described as "the cupidity of the doctors." It is announced that a public meeting is to be held at an early date, in the Mansion House, Dublin, for the purpose of protesting against the unreasonable demands of the medical profession on friendly societies, and that the Lord Mayor has consented to preside, should he be in Dublin at the date of the meeting. The calling in of the public to help in the settlement of a business matter seems to us a weakness on the part of the officials of the societies. They must hope to get by intimidation what they despair of winning by reason and fair dealing. It can only, however, have the effect of embittering the dispute and of strengthening the spirit of the medical men concerned. We regret to note that the Lord Mayor of Dublin has permitted himself to take sides in this dispute between two important bodies of the citizens. Mr. Sherlock, since coming to the chief dignity of the city, has hitherto show a praiseworthy liberality of conduct, and a judicious consideration of the rights of every class of the citizens. It is the more regrettable that he should now throw the weight of his personality and position with either side in what is essentially a business dispute. Not content with attempting to rouse public opinion in a general way, some of the friendly society officials have succeeded in persuading the poor law guardians of the North Dublin Union to adopt the absurd measures embodied in a resolution we quote in another column. *Inter alia* it is proposed to stop the supply of bodies to the medical schools. In order, as they think, to injure the medical profession, the guardians are willing to put a stop to medical education in Dublin, and inflict an irreparable injury on the city itself and on the whole country. It may be necessary to point out that it is in the interests of the public, and not primarily of the profession, that the medical men of the future should be thoroughly grounded in the essentials of their art. Again, were the resolution of the guardians to prove effective in limiting educational opportunities in Dublin, the rate-payers would be the sufferers by the loss of the schools of medicine. Lastly, if the number of men entering the profession were really curtailed, the power of those already in practice would be increased. We have no fear, however, of any of these things. The folly of the resolution is so obvious that it is bound to be rescinded without loss of time. We repeat that the difference between the doctors and the societies is a business matter to be settled between the parties concerned. The intervention of any third party can only be an obstacle to a settlement.

CURRENT TOPICS.

Bettering the Race.

Nowadays, when we are all practical meliorists, the problem of the improvement of the race as a whole is always being presented to us in some form or another. The study of heredity and the teaching of active and passive eugenics with the practice of tentative reforms in the matter of environment and nutrition assail the question in all quarters from the most ultimate fundamentals to the merest superficialities. These problems of nature and nurture are attacked with characteristic thoroughness and enthusiasm in America. American public opinion resembles that of Athens in the respect it gives to any new thing. Originality is actually an advantage, and an idea *per se* is not taboo. In the United Kingdom we have, it is true, had proposals for the sterilisation of the unfit brought before us, and vasectomy has been seriously suggested as a means of lessening the offspring of the philogenitive paranoiac. At a meeting of the Georgia Medical Society we are referred to men who have performed castration almost wholesale on the inmates of institutions for the feebleminded, with results entirely satisfactory to the operators, who claim that disciplinary measures are useless, that vasectomy leaves the patient in possession of the very essence of his disordered state and that segregation is economically unsound, as it offers no opportunity for the defective subject's return to a more or less useful career as a citizen without the danger of his perpetuating his kind. Whatever our opinions may be, it is certain that the legislative conscience of this country will not sanction such schemes at any rate for some considerable period.

Electrically Sterilised Milk.

The *Boston Medical and Surgical Journal* prints an account of some interesting experiments conducted by Dr. C. B. Novey and Professor J. C. Caldwell at the Ohio State University at Columbus on the electrolytic purification of milk. Their method is to allow the milk to flow through a series of metal vessels which form electrodes of opposite polarity, while an alternating current of 2.5 amperes at a pressure of 2,000 volts is applied for fifteen seconds. Their results were extraordinary. Milk, containing over 19 million bacteria per cubic centimetre, had this number reduced by 99.97 per cent., and several other similar experiments gave results of the same magnitude. The milk showed no chemical changes that would account for the sterilisation, nor was the heating that took place sufficient for this purpose. It would seem that further investigation on these lines might lead to a method of value in the production of the all-important pure milk. The method apparently has the advantage that it might be applied equally readily to large or small quantities of milk. Moreover, if applied on a large scale, it ought to be the most economical method of producing safe milk. As no chemical changes are found to occur in the milk as the result of the electrolysis, its nutritive value and æsthetic properties remain unchanged. It will be necessary, of course, to ensure that it is not specially the pathogenic bacteria, such as the tubercle bacilli, which are unaffected.

Industrial Diseases.

An official intimation has been issued making known the fact that the Industrial Diseases Committee has resumed its labours. The Committee consists of Sir T. Clifford Allbutt, His Honour Judge A. H. Ruegg, K.C., Dr. T. Morison Legge, Medical Inspector of Factories, with Mr. Ellis Griffiths, K.C., M.P., of the Home Office, as Chairman. Evidence has been taken within the last week or two with regard to the occurrence of Dupuytren's Contraction among minders of lace machines. The Committee will later inquire whether there is any evidence of the occurrence of this disease in other trades. In the Workmen's Compensation Act of 1906 six diseases are scheduled. Several others were added in 1907 and 1908. The question now being considered is whether to schedule Dupuytren's Contraction, cow-pox, and clonic spasm of the eyelids apart from nystagmus, so as to enable workmen disabled by these diseases to claim compensation if the disease is due to the nature of their employment. Any of our readers desiring to give evidence for or against the extension of the Workmen's Compensation Act to these diseases should communicate with the secretary of the Committee at the Home Office. It seems hardly necessary to point out that if the Committee should feel able to formulate definite opinions upon the questions at issue a vast amount of costly and tedious litigation may be prevented.

The Medical Society and Dr. Lettsom.

Few persons, even among those who know London fairly well, are aware that in Bolt Court off Fleet Street, midway between Fetter Lane and Farringdon Street, there still exists the house in which Dr. J. Coakley Lettsom lived and practised and in which he settled the Medical Society of London in the year 1787. In Bolt Court, too, and contemporary with Lettsom lived Samuel Johnson. His house was pulled down and on its site has been erected a School of Photo-engraving and Lithography by the County Council. In a recently-published account of "Fleet Street in Seven Centuries," Mr. Walter G. Bell writes:—"Nothing of note is left of Bolt Court save No. 3. This picturesque, eighteenth-century building is quite unspoilt. It was the residence of Dr. John Coakley Lettsom, who in 1787 settled the Medical Society of London there. In 1790 he gave the house, which was his freehold, to the council; his other benefactions to the Society, of which he was a founder in 1773, and three times president, included funds and a library of books. The Society remained there until 1850, and one of the treasured possessions at their present premises in Chandos Street, Cavendish Square, is a painting by Medley of a meeting of the council in Bolt Court, at which Dr. Lettsom, a tall spare figure, is presenting the title deeds. The canvas contains twenty-two portraits of medical men." It is interesting to recall that Medley was the maternal grandfather of the late Sir Henry Thompson, eminent alike as a painter and surgeon. Mr. Bell adds: "The Medical Society of London has enrolled in its ranks all the distinguished physicians in the capital for upwards of a century, and honours the memory of its most illustrious founder by the Lettsomian Lectures delivered in its theatre. It still owns the old house in Bolt Court. Over the entrance is the Society's emblematic tablet, placed there by Lettsom himself. A ribbon bears the name. The central figure, standing in front of a pyramid, is the Isis of Sais, the revealer of the secrets of Nature, who presided over medicine; having discovered the virtues of healing plants, she is said to have invented it. The Sphinx and the coiled serpent on either side of her represent Eternity. Within the circle beneath is an inscription in worn Greek capitals, which translated reads: 'I am whatever is, or has been, or will be, and no mortal has hitherto drawn aside my veil.'"

The Holborn Baby Show.

The success which attended the holding of the Baby Show the other day at the offices of the Holborn Borough Council argues well for the multiplication of such exhibitions in other populous districts. Sixty of the best babies in Holborn, most carefully chosen from 250 candidates up for examination and competition, ranging in age from one month to a year old and are the children of parishioners of Holborn, flower sellers, stage supers tailoresses, charwomen, etc. They were examined by Drs. Florence E. Willey and E. Bolton, and the special points to be taken into consideration were: age, size, weight, general fitness, cleanliness, etc. All the babies were fed naturally with the exception of ten who were brought up on cow's milk. The prizes, which took the form of useful baby clothes, were presented to the winners by the Mayoress of Holborn, and further dignity was lent to the scene by the presence of the Mayor. The purpose of the Baby Show was to demonstrate the value of the work done by the municipality of Holborn in reducing the death rate of Holborn. This can be expressed in figures as follows showing the death rate per thousand in Holborn in 1911 and six preceeding years :—

1905	1906	1907	1908	1909	1910	1911
126	128	131	111	101	100	113

(The infant death rate in the whole of London, year 1911, being 129). The slight increase for the year 1911 is accounted for by exceptionally hot weather, there having been 26 deaths from diarrhœal diseases in comparison with only nine in 1910. The whole of this work is under the direction of the Medical Officer of Health for Holborn. A very large proportion of the good done is owing to the supply of prepared milk at special rates so that any mother may have milk for her baby for the low price of 4d. a day. Those who are unable to pay anything have the milk given to them free and this is rendered possible by the generosity and public spirit of the Mayor, Mr. Hazell, who himself makes up the deficit every year. It is to be hoped that the good example of such a public-spirited municipality may be followed in other great centres.

An Experiment in Public Medical Service.

At a meeting of the governors of the Salisbury and South Wilts Provident Dispensary last week the medical staff put forth a scheme for further medical service for persons who would not be insured under the new Act. The small revolution involved is, it seems, being carried out with the friendly co-operation of the committee. The medical staff have resigned, and the work of the dispensary will come to an end in January. It being not yet known what arrangements may be made by the county insurance committee, the scheme does not at present deal with insured persons. The staff offer to rent the dispensary, and it is possible the rent may be devoted to the fund for supplying special treatment. The wage limit has been fixed at £2 per week. For uninsured persons the insurance will be 2d. a week if the income exceeds £1 a week, and 1½d. if it does not exceed £1. A tariff has been arranged for the inclusion of wives and children. The conditions of the service embody all the claims of the British Medical Association; and the scheme will be run on business lines.

PERSONAL.

Sir Donald MacAlister was among the recipients last week of the honorary degree of D.Sc. of the University of Bristol.

Dr. H. Valentine McKenzie, M.D., C.M.Edin., has been appointed Honorary Ophthalmic Surgeon to the Newton Abbot Hospital, Devon.

Professor Walter G. Smith, M.D., has been elected President of the Royal Academy of Medicine in Ireland for the ensuing year

Dr. B. A. H. Solomons and Mr. R. H. F. Taffe have been admitted to the membership of the Royal College of Physicians of Ireland.

Dr. J. A. Braxton Hicks, M.D., B.S.Lond., D.P.H., has been appointed Pathologist and Registrar to the Queen Charlotte's Lying-in Hospital.

The honorary degree of Doctor has been conferred on Dr. Sydney Young, Professor of Chemistry in the University of Dublin, ex-Bristol University.

Sir George H. Savage, M.D., delivered the Presidential address last night before the newly constituted Section of Psychiatry of the Royal Society of Medicine.

Dr. John Newport Langley, Professor of Physiology at the University of Cambridge, has been awarded the Retzius Gold Medal of the Swedish Medical Society.

Dr. J. Edward Squire, C.B., delivered an interesting lecture last week in connection with the Tuberculosis, Nursing and Cookery Exhibition held at Gloucester.

Mr. Edmund Owen, LL.D., F.R.C.S., Consulting Surgeon to St. Mary's Hospital, has been elected a Vice-President of the Royal College of Surgeons of England, in the place of the late Mr. Clinton T. Dent.

Dr. J. A. D. Radcliffe, Pathologist to the King Edward VII. Sanatorium, was presented last week with the Weber-Parkes Medal of the Royal College of Physicians of London in recognition of his work on tuberculosis.

Dr. Dundas Grant will deliver the inaugural lecture of the winter session at the Central London Throat and Ear Hospital on Friday, October 25th, at 3 p.m., on "Some Views in Oto-Rhino-Laryngology Reviewed; Some Criticisms Criticised."

Mr. Hubert Dunbar Shepherd, of Kedleston Road, Derby, M.B., F.R.C.S., Medical Officer of the Derbyshire Sick Children's Hospital, President Royal Medical Society, Edinburgh, who died on August 12th, left estate valued at £3,070 gross, with net personalty £2,812.

Dr. G. H. W. Robertson, J.P., has been awarded the Medal of the Order of St. John of Jerusalem in England for his heroic conduct in attending to the wounded passengers in a railway accident in South Africa last year, while he himself was seriously injured and suffering great pain.

Alderman Dr. Young, of Bolton, has resigned his appointment as a member of the Bolton Insurance Committee on the ground that he cannot consistently occupy the position and at the same time remain loyal to his brethren of the medical profession during the present strained relations with the Government.

Mr. Leonard Arthur Bidwell, F.R.C.S., aged 47 years, of 15 Upper Wimpole Street, W., and of Tower House, Bexhill, Surgeon-Major in the Bucks Yeomanry, Consulting Surgeon to the City Dispensary and the Blackheath and Charlton Cottage Hospital, left estate of the gross value of £12,223, of which the net personalty has been sworn at £8,305.

Professor Metchnikoff, of the Pasteur Institute, Paris, will deliver the Lady Priestley lecture on "The Warfare against Tubercle" in London on Friday, November 29th, at 4.30, in the great lecture theatre of the Royal Society of Medicine, 1, Wimpole-street, Cavendish-square. It will be given in French and illustrated by lantern pictures. Professor Metchnikoff is delivering the lecture under the auspices of the National Health Society, of which Princess Christian is president. Members of the society will be admitted on presentation of members' tickets. Applications for tickets for non-members, price 10s. 6d., must be made before November 29th, to the secretary, National Health Society, 53, Berners-street, Oxford-street, W.

A CLINICAL LECTURE

ON

TWO CASES OF ACROMEGALY. (*a*)

By T. GILLMAN MOORHEAD, M.D., F.R.C.P.I., D.P.H.,

Visiting Physician to the Royal City of Dublin Hospital.

Since its first recognition as a definite clinical entity some twenty-five years ago, acromegaly has continued to exert a curious fascination on the medical mind, a fascination more than justified by the strange transformation that the disease produces in the features and forms of those unfortunate individuals who are victims of the malady. Long before the time when Pierre Marie in 1886 achieved fame by his description of two cases of this as yet unknown disease, isolated cases had been recorded under different names, and one may well imagine that the occurrence of such cases could in a superstitious age give food for many a fable in which a witch's curse came true.

To us, however, to-day, not the history of acromegaly in sculpture, in folklore, or in medical writings is the most important, but rather the practical recognition and diagnosis of the condition as we are likely to encounter it in practice. It is commonly believed that acromegaly is a disease so rare that it is almost unnecessary for the medical student to take cognisance of it, but the very fact that I am able to show you two cases to-day and the further statement that I have seen at least three other cases, one of them in Vienna, the other two in Ireland, is sufficient to disprove such a belief and to justify me in selecting the subject for our consideration this morning.

In Sternberg's classical work on the subject it is pointed out that in attempting to arrive at a diagnosis of the cause of any particular group of symptoms, unpleasant mistakes may occur if the golden rule is omitted in every examination of a patient to review the whole individual, at least in a hasty manner. So important is this golden rule that one might regard it as one of the primary axioms of medical diagnosis, but as it is apt to be neglected in these days of minute examination, I recall it before introducing the patients. As you view the features of both of them you will realise that anyone with sight behind his eyes could diagnose the affection, as my old teacher, the late Dr. Bennett used to say, from the saddle of a high trotting horse, yet one of the two had apparently gone unrecognised for years, though under medical care for many of the subjective phenomena characteristic of acromegaly.

The first of the two patients is an example of the benign form of the disease, which may last apparently indefinitely, and is accompanied by only trifling disorders. She is a woman aged 65, who has been under my observation for the last eight years. She first came to my extern department in the autumn of 1904, and then presented a most striking appearance. She was most intensely cyanosed, her breathing was stridorous and her general aspect that of an individual in imminent danger of death. With difficulty she stumbled across the floor of the room, and sank into a chair unable to do more than concentrate her attention on a further effort to gain respiratory ease. A rapid examination revealed the cause of her trouble in the presence of a cystic polypus attached by a pedicle above the left vocal cord, and impacted in the rima glottidis. At each inspiration the impaction became more pronounced, while during expiration a little relief was obtained. My colleague, Mr. Stoney, removed the polypus without difficulty, and time was then obtained for a study of the other peculiarities which the patient presented, and which I now demonstrate to you. During the eight years that have elapsed since I first saw her little or no change has taken place in her appearance, as can be proved by a comparison of photographs taken after her first visit with her appearance now. The first thing to attract attention is the extreme redundancy of the soft tissues of the face; the lips are very full, the alæ nasi much enlarged, and the cheeks and forehead puffy. The skin is moist and greasy, of a brownish tinge, and the hair is coarse. The head is massive, enlarged in an antero-posterior direction, and presenting high and prominent temporal ridges, which have receded as the temporal muscles have gradually crept upwards on the side of the calvarium. There are no teeth, but the lower jaw is much enlarged, and on inspection of the interior of the mouth the tongue is seen to be enormous with huge circumvallate papillæ. The rima glottidis is also very big and the cartilages of the larynx are prominent. The next feature to attract attention is the hand; its enlargement is proved by the fact that the patient wears a ring which is now quite irremovable and is, indeed, almost embedded in the substance of the finger. The term "battledore hand" well describes this peculiarity. A similar enlargement of the feet is present, and the X-ray pictures which I show you demonstrate that the enlargement is due not only to bony overgrowth, but also to general hypertrophy of the connective tissues of the extremities. It is often stated that the enlargement of limbs in acromegaly is entirely confined to

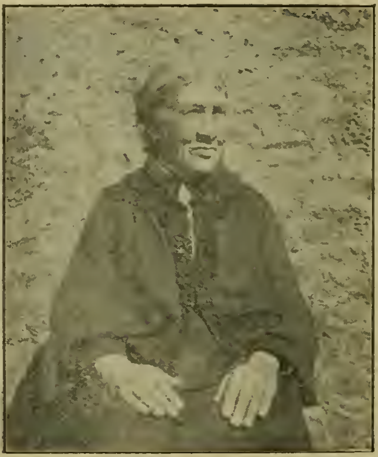

Photo of Case I. (For description see text.)

(*a*) Delivered at the Royal City of Dublin Hospital.

the hands and feet, and that no enlargement of the legs or arms is met with, and that in this way the disease can be distinguished from hypertrophic pulmonary osteoarthropathy in which the enlargement usually involves the entire limb. This is, however, only true in part; undoubtedly the enlargement of the hands and feet is out of proportion to that of the arms and legs respectively, but a glance at this patient's limbs will, I think, convince you that they are thicker and more massive throughout than one would expect to meet even in a strong working woman. In other ways this patient also conforms to the typical acromegalic type; she presents, as you see, a marked kyphosis of the dorsal spine, and the antero-posterior diameter of her chest is much increased, the whole thorax being typically anthropoid in type. An interesting symptom is extreme brown pigmentation of the skin of the entire body. This condition is described as occasionally met with, but it must be rare to find it so universal and so pronounced. The appearance, in fact, is that of rough tanned leather.

As regards subjective symptoms, it is most important to note that this patient does not complain in any way. Dr. Leonard Mark, himself an acromegalic, who recently published a profoundly interesting account of his personal experiences, complains that most text-books of medicine, while crammed with detail concerning the various physical changes that may be noted in the disease, are for the most part silent concerning those symptoms, which are all-important to the patient. In his own case, serious faceache, headache, nasal catarrh, ocular troubles, and a frequently recurring state of apathetic yet troubled drowsiness, to which he applies the term "the acromegalic state," pursued him, and to some extent still pursue, throughout the entire course of his disease. Fortunately, however, many cases, even when there is distinct enlargement of the pituitary body, as the enlarged sella turcica in the X-ray photograph proves to be present in this patient, run a benign course, and suffer in no way, except, perhaps, in their vanity. This patient's cerebral development is not of the highest order, and so it has been difficult positively to exclude the existence of all ocular symptoms, but certainly no subjective troubles of importance have attracted attention since the laryngeal polypus of which she at first complained was removed.

Of very different type is my next patient. He belongs in Sternberg's classification to the "commonest form, chronic acromegaly, the duration of which is from eight to thirty years." I first saw him in August, 1908, when, as he walked into my study, the diagnosis was written on his face. He was then about thirty years of age, and his change of appearance as compared with a photograph of ten years previously was so great that it was difficult to believe that the photograph was of the same individual. With the physical aspect of this patient I need not detain you, as in general he presents the same characteristics as the previous patient. One notices the enlarged cranium, the sloping forehead, the prominent lips, the big mandible, the huge tongue, and the enlargement of the hands and chest. The feet in this case are apparently not altered, and the patient himself says that he now wears the same size boots as he did fifteen years ago. Further, there is no pigmentation of the skin. Many subjective symptoms, however, are present. For many years he has suffered from severe headaches; in fact, he will tell you that he is never for a single day entirely free from pain, and that sometimes the headache is almost intolerable. He has had a good deal of ocular trouble, having severe astigmatism in both eyes, and, in addition, a careful examination of his visual fields shows a well-marked bitemporal hemianopsia. This symptom, which is produced by pressure on the optic chiasma, is practically diagnostic of acromegaly, and is of course produced by the changes in the pituitary fossa and the base of the skull. Loss of memory and extreme somnolence are complained of; fatigue is easily produced by comparatively slight exertion, and occasionally palpitation proves troublesome. In neither of the two cases is there any abnormality of the blood or urine.

Having now demonstrated to you the main features of these cases, we may proceed to discuss briefly some of the important questions for which an answer is so urgently required in our attempt to understand the physiological processes at work, and in our attempt to alleviate or cure these unfortunate cases. Here, as elsewhere in the domain of physiology and pathology, clinical medicine has led the way and has marked out the paths along which laboratory research may with most hope be conducted. In the original memoirs of Pierre Marie one case is recorded in which the pituitary gland was enlarged, and even prior to this, Langer, in his study of the skeleton of giants, had noted the existence of an enlarged sella turcica in one variety of giants. The association of changes in the pituitary gland with the syndrome of acromegaly is now a long established fact, and much work has been done to endeavour to discover the function of the pituitary gland and the part it plays in the production of disease.

In 1908, Paulesco, by a series of well-planned operations on dogs, proved fairly conclusively that the presence of the pituitary gland is absolutely essential to life, and was of opinion that removal of the anterior glandular lobe alone was equivalent to removal of the entire gland, and was uniformly fatal. Removal of the posterior lobe led, he found, to no appreciable disturbance whatever. As these conclusions have been in the main confirmed by Cushing and his collaborators, we may, despite the fact that Horsley has obtained quite different results after operations on monkeys, for the present accept that the pituitary gland is essential to the maintenance of life. The train of symptoms produced by its removal are, according to Cushing, quite characteristic, and consist in a peculiar form of paresis, more especially of the hinder part of the body, muscular tremors, subnormal temperature, gradually increasing lethargy and death. Cushing, however, found that the posterior lobe of the gland was by no means functionless, and definitely concluded that it furnishes a secretion which acts in an opposite way to the internal secretion of the pancreas, and, in fact, diminishes the power possessed by the tissues of metabolising carbohydrates. If this be so, an interesting sidelight is thrown on one of the symptoms of acromegaly. It has long been known that in certain stages, more particularly the early ones of acromegaly, glycosuria may be present, and that such glycosuria is likely to disappear in later stages. Interpreting these facts with the aid of Cushing's results, it would naturally seem that the earlier process in acromegaly is one of hyperfunction of the pituitary, and that later on, as a result of progressive changes in the gland, diminished function results.

Many other interesting facts have been made known by experiment, a few of which are worth recalling. One of the occasional symptoms of acromegaly is extreme polyuria, a symptom which was present for some time in the second of the two cases that we have seen, and the explanation of this occurrence seems to be found in the fact that injection of extracts of the posterior lobe have a powerful diuretic effect. The diuretic effect is, in fact, so pronounced that it is stated by some to be the most powerful diuretic drug that we possess.

The rise of blood pressure produced by injections of pituitary extract is now well recognised, as are also the stimulating effects produced on peristalsis and uterine contractions, but as these up to the present have no recognisable connection with acromegaly, it is unnecessary to dwell upon them.

Feeding experiments have given various results. Schäfer, in a preliminary report, finds that feeding with the anterior lobe causes increased rate of growth in rats, while Sandre, with similar experiments, recorded arrest of growth. Again, continued injection of extracts of the anterior lobe has been found quite devoid of result, while injections of the posterior lobe over a prolonged period led to wasting and degenerative changes in the liver and spleen.

When, from these few results that I have quoted out of the many records so admirably summarised in Swale Vincent's recent work on "The Ductless Gland," we endeavour to arrive at a conclusion as to whether we are dealing in acromegaly with hyperfunction or hypofunction of the pituitary, a definite answer is obviously impossible. A majority of the facts is, however, in favour of hyperfunction. The most usual enlargement in the disease is adenomatous in nature; polyuria and glycosuria are, as already pointed out, occasional symptoms, and, lastly, hypofunction of the reproductive organs, a condition almost universally present in acromegaly, is believed to be an actual cause of pituitary hypertrophy.

There remains for discussion differential diagnosis, treatment and prognosis. None of these, however, need detain us long. As far as differential diagnosis is concerned, my own feeling is that once the idea of acromegaly has entered one's mind in connection with a case, little difficulty should be experienced in excluding other possibilities. Sternberg gives a formidable list of no fewer than thirty-four distinct conditions which may be or have been mistaken for acromegaly; and no doubt mistakes occur, and at times legitimate doubt may exist regarding a diagnosis. It is therefore worth while remembering that an X-ray photograph of the skull will almost certainly show an enlarged sella turcica in acromegaly, and that amenorrhœa in women and loss of sexual power in men are usual early symptoms.

Prognosis has to some extent been already considered, inasmuch as we have already recognised the existence of a "benign type" and of an "ordinary type" of the disease. A few very acute cases have occurred in which sarcoma of the pituitary body was present, but in most cases it is safe to expect many years of life. Further, the sufferer in an "ordinary case" may be cheered by telling him that frequently in the later years of the malady the headache and other painful symptoms become less. At the same time, indeed, the memory may become worse and the mental powers may greatly deteriorate; but this information may be judiciously concealed, and, indeed, it occasionally happens that even in mental condition these patients improve in the later stages.

Our knowledge of its pathology and clinical course does not hold out much hope that medical treatment is likely to be very successful in curing the disease. A large number of remedies have been tried, more especially glandular extracts, testicular, thyroid, and pituitary gland itself. If the cause of the disease is hypertrophy of the pituitary gland, administration of the pituitary extract might at first sight seem contra-indicated. This is, however, not necessarily the case. It is now well recognised that thyroid extract is a most useful remedy in causing subsidence of parenchymatous goitres, the actual theory underlying the method of treatment being that the goitre is the result of a demand on the part of the body for more thyroid secretion, and that if this is supplied from outside sources the thyroid will return to its normal size. Arguing in a similar way, it might be supposed that pituitary extract would lead to a diminution in size of an hypertrophied pituitary gland. Be this as it may, I can confidently report a considerable improvement in the subjective symptoms of the second case after a three months' course of pituitary gland tabloids, though there was no objective evidence of improvement. So strongly does this patient believe in them that he has again and again voluntarily returned to their use, while, on the contrary, he has formed the opinion that thyroid extract is quite useless. This experience is different from that of Magnus Levy, who has reported a case in which pituitary extract seemed harmful. One must, of course, accept statements of patients with becoming scepticism, but I am at any rate convinced that the pituitary has not done this patient any harm, and its subjective result in the case would lead me to prescribe it again. When speaking of his condition before and after its use, the patient, who is an educated man, is emphatic that it was beneficial.

If, however, medical treatment be put on one side, we must next enquire what surgery can offer. There is an increasing record of successful cases in which the pituitary gland has been removed, and apparently in acromegalics the entire removal of the gland does not of itself prove fatal. The operation is, however, most serious, and should never be undertaken except at the urgent request of a patient to whom the full course of the disease has been explained and who is fully aware of the gravity of the surgical procedure. A mere decompression operation is, of course, less serious, and may be beneficial in relieving headache. Finally let me add that no matter what view one takes regarding the prospect of cure by either medical or surgical means, no slackness should be shown in attempting to relieve symptoms. Local treatment may benefit nasal catarrh; suitable glasses may be prescribed; and relief may often be obtained for the headache or faceache by means of the ordinary analgesic drugs. It may be necessary to change one's drug frequently as the one in use loses its effect, but we should never weary as the patient pins his faith on his medical adviser, and if he is met with the statement that nothing can be done he is likely to drift into the slough of despond. Hope deferred, remember, is better than despair.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal The lecture for next week will be by G. Hoppe-Seyler, M.D., Professor of Medicine in the University of Kiel. Subject: "The Treatment of Icterus."*

A Health Conference at the Guildhall.

At the Guildhall, on the 28th inst. and two following days, a conference on "The Health of the City Worker," arranged by the Incorporated Institute of Hygiene, will be held. The Lord Mayor is to receive the delegates on the first day. On the 28th Sir William Bennett will preside, and the subject discussed will be "The Health of the Business Man." On the 29th, under Professor Haliburton's presidency, "The Health of the Warehouseman and Clerk" will be dealt with, and on the 30th, when Sir Thomas Oliver takes the chair, "The Health of the Factory Worker" will be under discussion.

ORIGINAL PAPERS.

THE PASSING OF MORBID ANATOMY. (a)

By SIR JAMES FREDERIC GOODHART, LL.D., M.D., F.R.C.P.,
Consulting Physician, Guy's Hospital.

After referring to the far-reaching character of the immortal discovery of William Harvey, the orator went on to emphasise the importance and, indeed, the fundamental necessity of studying the life-history of the living cell, and especially of the individual cancer cell. Much important work had been and was being done by Dr. Bashford and his fellow-workers of the Imperial Cancer Research Fund, for during the last ten years this subject had been followed up in short-lived animals, such as the mouse, where alone it was possible, and the results seemed to show, not that the environment, but that the individual cell was the master of the situation, and that the dominant issue which came up was—What was there in that cell or influencing it that gave to it such an inexhaustible power of propagation?

But were they sufficiently alive to the fact that pathology was no series of stationary phenomena, but constantly on the move, like all else in Nature? What alterations had they not seen in 40 years? Pyæmia might be said to be wiped out; typhus was well-nigh forgotten; typhoid fever had altered; diphtheria seldom attained the initial severity that so often characterised it of yore and was much more amenable to attack; scarlatina was of a much milder type; erysipelas was more of a rarity; malaria and Malta fever had been run to earth; the late results of syphilis seemed to him to be far less often in evidence; lardaceous disease, so very common in their early days, was now seen but seldom; and they had come at grips with acute rheumatism, and, it was to be hoped, with tuberculosis. Probably as much might be said of other diseases, and good old age was both more prevalent and more enjoyable. It was true that those ills belonged to the great group of epiphytic diseases that had been abolished in direct response to the researches of Pasteur and Lister, and that there was no such evidence of any general move all along the line. But if they made away with even one large group of maladies, how large a part of the morbid anatomy of the organs must alter too, and even then how little account would be taken of numberless arrested purposes that made for the beginnings of other diseases. Pathology not only changed but it shifted its ground. He was told that morbid anatomy was now much less in evidence, and discussions of the intricate problems that were behind it occupied more attention. We had not yet reached finality. Even bacteria were probably results and not causes; they strove with or cancelled one another to ulterior ends, and we were gliding on in advance of the most painstaking morbid anatomy. How like was radium in all but death to what he would call the aureole of life! Here was one substance that was always spending yet was never spent; that had power within it to regather of its loss, and by its action on the cell might even be said to originate the function of vitality. But did the spirit of life die? It might correlate with other forces of Nature; it might perhaps transfer itself to other forms of being. Had we begun to see that it might transcend the firmament of space? The physician thought not of death but of the tenacity of life, and of how long, save by catastrophe, it took to bring the machine to a standstill.

The Trend of Modern Pathology.

All the changes and shifting of ground suggested to him the existence of a struggle on the part of the pathologist to find out some morbid change for every disease. But now the time had come when it seemed worth while to insist that all this work upon the foundations had, unconsciously perhaps, been ushering in a new point of view, and the latest phase of pathology concerned itself with the investigation of function. It was now no longer so much the morbid change as the prejudicial function that was to be their quarry, or rather the passage of the one into the other. He was there to contend that the future of pathology would be a physiological one, the study of erratic function that had confirmed itself into an habitually baneful one. And he saw no reason for limiting the pathology thus engendered to function only. It was surely permissible to hold that morbid function might bring about structural change. There was not an organ of the body of which this was not true, but how largely and obviously so when applied to the brain. A large part of the structural disease of the brain was led up to by slow and insidious misapplications of thought and action that ultimately declared themselves as pronounced disease. Insanity thus became a cancer-like mood of the cells of thought, as well as a mood of growth.

Another instance might well be fatigue, for it was a disease nowadays. They all knew the machine that would not spark aright. There was nothing to be called structural change, and even rest furnished no remedy. It was clear that what was required was a fresh stock of some form of energy for charging up the machine that they were as yet not able to supply—so far away, and yet perhaps so nigh. And with fatigue might well be coupled pain, for there were those who almost seemed to be born in pain and of a sort that no remedy was able to assuage. Even more than death, pain was our hereditary foe; no quarter was given. In olden days hysteria stalked abroad, but to-day a broader view of physiology would teach that pain was no certain indication of any existing morbid anatomy; that its intensity was always subjective, individual, aloof from standardisation; and it was evident that in chronic pain one needed to recreate the nervous elements or to instil them with some electroid that should reset the spring of the machinery in motion, and guide it smoothly on its livelong bent. Nor, though it had been the quest of æons, did this seem to be inexorably beyond the knowledge of the future.

This brief survey must suffice to show how much pathology there was yet in front of them, if the future was to be disentailed of its heritage of disease, and how difficult it must be to acquire the information necessary to enable them to bring the aid they would to sick humanity. The outcome seemed clearly to be—experiment, and ever more experiment. They came, indeed, back to Harvey's teaching—to search out the secrets of Nature by such means. The social instinct was hypersensitive to the use of this word in relation to disease. But why? He supposed that there had never been a dose of medicine administered—however much they thought to have divined its action—that had not been in some measure an experiment. Further, what else was it doing in the economy at large? Was its mission ended when the behests of the physicians were accomplished? There were some who thought and spoke of experiments as if they were performed only upon the lower animals and the poor. The fact was that by experiments the worlds had grown; experimentation was the one fundamental necessity of all progress; and the whole of animal life—life of every kind—to reap the benefit must share the risks and chance the pain.

(a) Abstract of the Harveian Oration delivered before the Royal College of Physicians of London, on October 18th, 1912.

THE WIDENING OF THE SCOPE OF ABDOMINAL SURGERY FROM LIFE-SAVING TO HEALTH-RESTORING OPERATIONS. (a)

By ARTHUR E. GILES, M.D., B.Sc., F.R.C.S.,

Surgeon to the Chelsea Hospital for Women; Gynæcologist to the Prince of Wales' General Hospital, Tottenham.

It is interesting to recall the fact that abdominal surgery is only a little over a hundred years old; because, although various abdominal operations have been performed by heroic surgeons from the earliest times, it was the establishment upon a secure basis of the operation of ovariotomy that secured the proper recognition of abdominal surgery generally. The first successful ovariotomy was one of the triumphs of the New World, for it was performed by Ephraim McDowell, of Kentucky, in the year 1809. Naturally, this historical case did not by itself establish ovariotomy upon a secure basis; on the contrary, for many years there was much opposition and there were few cases. McDowell himself performed the operation only twelve times, with eight recoveries; and for the span of. a generation the attitude of the profession was mainly one either of scepticism or of more or less thinly veiled disapproval. The next important advance was made by Charles Clay, of Manchester; his first successful ovariotomy was in 1842, and in all he operated on three hundred and ninety-five patients, with one hundred and one deaths, his mortality being thus about 25 per cent. Think of the courage that must have been required to persevere in the performance and the advocacy of an operation that was attended, at its best, with a mortality of 25 per cent. In 1861, Tyler Smith, speaking from the presidential chair of the Obstetrical Society of London, could utter these pessimistic words, "In the long run, I believe, the results cannot be favourable, either in general or special hospitals." Happily, Tyler Smith's gloomy forecast has not been fulfilled; and by way of illustration and commentary I may mention that at the Chelsea Hospital for Women during the twenty-five years, 1885 to 1910, eight hundred and forty-eight ovariotomies were performed, with forty-seven deaths, giving a mortality of 5.5 per cent.; and if we compare the beginning and the end of this period, we find that in the first five years there were seventy ovariotomies, with nine deaths, or 12.8 per cent.; whilst, in the last five years, there were two hundred and four ovariotomies, with seven deaths, or 3.4 per cent. The results in general hospitals, which at one time were deplorable according to our present standard, are now practically as good as in the special hospitals. Comparing my own cases at the two hospitals with which I am connected, one a general and the other a special hospital, I find that at the Prince of Wales' General Hospital, Tottenham, I have had one hundred and forty-eight ovariotomies with five deaths, a mortality of 3.3 per cent.; whilst at the Chelsea Hospital for Women I have had one hundred and six ovariotomies with three deaths, or 2.8 per cent. Naturally, the later results are rather better than the earlier ones; the figures for the last ten years, from July, 1902, to July, 1912, for the two hospitals combined, work out at two hundred and twenty-three cases with five deaths, or 2.2 per cent.

It would take too long to enumerate the successive steps by which the mortality of ovariotomy was progressively lowered; nor can I here pay the tribute of recognition and praise to the brave and brilliant workers who, through good and evil report, persevered in perfecting the operation; it must suffice to recall that the three great factors that revolutionised the results of ovariotomy and laid the foundations of modern abdominal surgery, were, first, the discovery of chloroform anæsthesia by Simpson; secondly, the perfection of *technique*, in which Spencer Wells played such a notable part; and thirdly, the introduction, by the genius of Pasteur and Lister, of antisepsis and asepsis.

It is difficult for us to imagine the performance of an abdominal operation without anæsthesia; and when thinking of the pre-anesthetic days, probably our first impulse is to thank heaven that we are not called upon to operate under such conditions. It is, therefore, a matter of great interest that we have preserved for us a record of the impressions of a man who operated both without and with anæsthesia. Charles Clay began his work before the discovery of chloroform, and one would have imagined that he would have viewed the introduction of anæsthesia with unmixed satisfaction; yet, in 1863, when he had performed one hundred and eight ovariotomies, with seventy-four recoveries, he appeared to be distinctly doubtful of the value of anæsthesia; for in a paper entitled "Observations on Ovariotomy," we find this curious passage: "With regard to the use of chloroform, I am not certain if this agent has really added to the success of ovarian operations. The first fourteen of my cases were undertaken before it was discovered, and of these fourteen, nine recovered. But, though I willingly admit the almost impossibility of obtaining the consent of females (at the present time) to submit to so formidable an operation without the aid of this valuable agent, and though I am equally convinced that chloroform is of itself one of the greatest boons to suffering humanity, yet, if it could be accomplished, I should infinitely prefer to operate without it, as the patient would bring to bear on her case a nerve and determination to meet so great a trial, which would assist beyond all value the after-treatment; it would also relieve the case from that most distressful retching and vomiting so common after all abdominal operations where it is used to the extent that is required in ovariotomy."

Anæsthesia and improvements in *technique* conspicuously lowered the mortality of ovariotomy by lessening two of the great risks; namely, shock and hæmorrhage; but even so, the mortality was still very high. In 1878, when Spencer Wells had completed nine hundred cases, there were seventeen deaths in his last one hundred. This was because the greatest danger, that of septicæmia, had not been removed, and it was reserved for Lister to defeat this formidable enemy of the surgeon and of mankind. It is through his labours, and those of his disciples all over the civilised world, that we, at the present day, can undertake these serious operations with light hearts; and when I record before you my last ten years' results, with a mortality of a little over 2 per cent., I do so in no spirit of boastfulness or self-aggrandisement; but in doing so I place a wreath of veneration and gratitude on the shrine of the mighty dead.

The admission of ovariotomy to a recognised place in surgery was, of course, not a sudden event that could be assigned to a particular date, or even a particular year. The growth of its recognition was gradual, but we may say that twenty-five years ago this recognition was an accomplished fact. By this time, many surgeons, encouraged by the results of ovariotomy, were performing abdominal operations for other conditions. As far back as 1863, Charles Clay performed the first successful hysterectomy for fibroids by the intra-peritoneal method; and in the same year Koeberlé, of Strasbourg, carried out the first hysterectomy by means of the *serre-neud* and the extra-peritoneal treatment of the stump. In 1879, Lawson Tait performed the first operation for the removal of inflamed tubes, and the same year witnessed the performance of Battey's first operation, in which healthy ovaries and tubes were removed for dysmenorrhœa. In 1883 Lawson Tait established another record by operating successfully in a case of ruptured tubal pregnancy. But the conservative spirits in the medical profession twenty-five years ago opposed the performance of these operations, although they admitted the justifiability of ovariotomy; just as their predecessors of a generation previously had opposed the performance of ovariotomy; they said that fibroids and inflammatory conditions of the tubes did not endanger life, and that, consequently, it was not justifiable to operate for the relief of these conditions. Their opposition appeared, at the time, to be justified by the high rate of mortality, which then ranged from 20 to 30 per cent., whilst the mortality of ovariotomy had become reduced to from 10 to 15 per cent. But, happily for the race, there were surgeons who had the courage to persevere, believing that the mortality of these operations could be brought down, even as had happened with ovariotomy.

(a) The address in Surgery delivered before the Canadian Medical Association, at Edmonton, Alberta, August 12th, 1912.

Thus the field of abdominal surgery became further extended; to enumerate only a few instances, we may mention the surgery of the appendix and gall-bladder, intestinal surgery, the operative treatment of gunshot wounds of the abdomen, and operations for intestinal obstruction. Even the field of obstetrics was encroached upon; for while obstetricians were discussing the relative value of craniotomy and induction of labour in cases of contracted pelvis and other forms of obstructed labour, the advance of abdominal surgery made Cæsarean section a safe and satisfactory alternative procedure. At the present time the destruction of a living child, on the ground that there is an obstacle to its birth in Nature's appointed way, is viewed with increasing repugnance; and we may look forward confidently to the time when the performance of craniotomy on a living child will be considered, save in very exceptional circumstances, as a relic of barbarism, stamping its perpetrator as an ignorant bungler.

There is no doubt that, while the mortality of abdominal operations remained high, the scope of abdominal surgery was limited in proportion. It is only desperate cases that admit of desperate remedies, and as long as the risk of operation was greater than the risk of leaving matters alone, it was wise and practical advice to recommend patients to endure their sufferings with Christian resignation rather than face the risks of surgery; and patients would have been justified, when operation was advised, in replying in the words of King David, "Let me fall into the hands of God, rather than into the hands of men."

We now come to the consideration of what has happened in the last twenty-five years, and therewith to the more special subject of these remarks, which is the phenomenal extension of the scope of operations, not for the saving of life alone, but for the relief of suffering.

To illustrate how the field of operations has extended in inverse ratio to the rate of mortality, I cannot give you a more graphic picture than is presented in the records of the Chelsea Hospital for Women. I have investigated the records of all the abdominal operations performed at this hospital during the twenty-five years from 1886 to 1910; and grouping them in periods of five years each, we find the results as follows:

Years.	No. of Abdominal Operations.	No. of Deaths.	Percentage Mortality.
1886—1890..	126	27	21.4
1891—1895..	206	35	17.0
1896—1900..	879	50	5.6
1901—1905..	1,493	63	4.2
1906—1910..	1,880	54	2.8

Thus, while fifteen times as many operations were performed in the last five years as compared with the first five years, the percentage mortality was eight times less.

By way of further illustration, I will take two individual classes of operation, one for the removal of the tubes and ovaries for inflammatory disease, and the other, the removal of the uterus for fibroids. I have chosen these two, because, while these operations are performed in a certain proportion of cases for the direct saving of life, their purpose is even more the relief of suffering and of chronic invalidism. The records of the Chelsea Hospital for Women, taken in the same way as before, are as follows:

OPERATIONS FOR TUBAL DISEASE.

Years.	No. of Operations.	No. of Deaths.	Percentage Mortality.
1886—1890..	12	4	33.3
1891—1895..	22	3	13.6
1896—1900..	198	7	3.5
1901—1905..	302	10	3.3
1906—1910..	363	5	1.3

HYSTERECTOMY FOR FIBROIDS OF THE UTERUS.

Years.	No. of Operations.	No. of Deaths.	Percentage Mortality.
1886—1890..	14	5	35.7
1891—1895..	12	5	41.6
1896—1900..	150	16	10.6
1901—1905..	345	18	5.2
1906—1910..	487	9	1.8

These figures show that, for tubal disease, the number of operations was thirty times greater in the last five years, compared with the first five, and the percentage mortality was twenty-six times less. In the case of hysterectomy for fibroids, the number of operations was thirty-five times greater and the mortality twenty times less.

I doubt if the whole range of surgery could show any other two operations that presented such an extension of scope and such a rapidly diminishing mortality within a space of twenty-five years. Surgery has long held an honoured place as the saviour of those doomed otherwise to die; the work of the last quarter of a century has given her an equally just and an even wider claim to be regarded as the restorer of those who are otherwise sentenced to what many feel to be worse than death, and that is, chronic invalidism and disablement.

A remarkable feature of this transition has been the corresponding change in the attitude of the general public towards surgical intervention. Formerly, an operation was regarded as a necessarily desperate remedy involving a perilous descent into the valley of the shadow of death; and it was only the power of a Christian faith or a stoical fatalism that enabled them, as Milton was taught by his Heavenly Muse,

> "to venture down
> The deep descent, and up to re-ascend
> Though hard and rare."

The operating theatre presented itself to the popular mind as a chamber of execution, over which hung the sign of the dripping blade, while about it lingered the echoes of the last sighs of departing souls. Now this same theatre has assumed, rather, the character of a temple of healing, with the whilom executioner transfigured into the High Priest. That which was a River of Styx, dark and cold, is now a Pool of Bethesda; and the ill-advised and taciturn Charon has been metamorphosed into the angel that troubles the pool as a signal of healing. (*a*)

This change in the attitude of the public towards surgical operations is not limited to any one class; we find that the intelligent and highly-educated among our patients have a considerable knowledge of what is involved in various operative procedures, and of the attendant risks and after results; and, because they are well-informed, they exhibit a well-reasoned confidence in submitting to operative treatment. On the other hand, the patients that form the greatest proportion of our hospital cases have but little knowledge of what is implied by operation, beyond the fact that they are sent to sleep and something is done; but their readiness to accept an operation as the

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(*a*) It may amuse our readers to see the following version of the above passage in the racy language of Western Canada, taken from the report of the address in the "Edmonton Bulletin." "Dr. Arthur E. Giles whispered to us in a confidential way that a doctor was not honestly represented by the drunken sailor, Charon, who offered to cross us over the river Styx in a toppley dug-out for two bits a head, but was really the patronizing barker for the pool of Bethesda, who called out in a mellifluous tone: 'Come on in, the water's fine.'"

proper treatment for them is equally great; all they ask is the assurance that it is for their good and that they will feel nothing; and we find that their confidence is born of their experience of what such treatment has done for their friends.

There is no doubt that implicit confidence on the part of our patients imposes upon us an added burden of responsibility in deciding what advice we are to give them, for, if their confidence is small, they will probably seek and obtain several opinions, and then make their own choice; but if their confidence is great, they will accept our opinion without question and act upon it without demur. But when the stage of advice is passed and that of action is entered upon, this confidence is of the greatest value to us, because the success of our operative work is immeasurably assisted by the trustful co-operation of our patients. This is true of those conditions involving questions of life and death, where it is our duty to say, "You must undergo an operation in order that your life may be saved," and it is equally true of those conditions where an operation is a matter of choice rather than of necessity, and where our formula will rather be this, "You will be well-advised to undergo an operation in order that your health may be restored." In my own practice, the distinction that I adopt is, that I *urge* an operation of necessity, and if the patient appears unwilling I use all my powers of persuasion; but I *advise* an operation of election, and after explaining the pros and cons I leave the choice to the patient.

I have dwelt at some length on this question of the attitude of our patients, because it is a most important factor in the consideration of operations for the restoring of health, as distinguished from operations for the saving of life.

Let me now say a few words about some of those conditions, in the department of gynæcology, whose treatment by surgical means has been rendered possible by the fall in the death-rate of abdominal operations.

We may begin with uterine displacements. These are conditions that never prove fatal, and therefore we could not advise for their relief any operative treatment that was attended by an appreciable mortality. And so it was only when the mortality of abdominal operations generally was showing a marked decline that the surgical treatment of displacements came into vogue. It is interesting to note that the first abdominal operation for retroversion was an extra-peritoneal one, namely, the Alexander-Adams operation; at that time the peritoneal cavity was still a kind of "*noli me tangere*," and every time it was opened there was a threat of septicæmia. Modern asepsis has robbed cœliotomy of its terrors; we have learnt the ways of the peritoneal cavity, and ceased to fear it. We now know that if we can leave the vulnerable diaphragmatic area alone, and avoid undue handling of the bowel, and refrain from introducing into the peritoneal cavity irritant chemical antiseptics, the peritoneum is a tolerant structure well capable of looking after its own interests.

It was not long, therefore, before intra-peritoneal operations were introduced for the treatment of displacements, most of them originating on this side of the Atlantic. We had ventrofixation and ventrosuspension of the uterus, with their modifications, and the various procedures for the intra-peritoneal shortening of the round ligaments. It is not necessary in this place to discuss the merits and demerits of these different operations: the one chiefly practised at the Chelsea Hospital for Women has been what we call hysteropexy, and in the twenty years, from 1891 to 1910, this operation was performed in five hundred and eighty-four cases.

The value of these operations is two-fold: in the first place, many patients are cured who cannot be relieved by other means, for example, cases of adherent retroversion and some cases of prolapse and procidentia. In the second place, patients can be saved from years of pessary treatment. I have before now defined pessaries as a necessary evil, that is, they are necessary sometimes, but evil always; and I have found no reason to alter this definition. It would be possible to draw up a serious indictment of pessaries: the unpleasantness of frequent examinations; the drawback of being chronically under the doctor's hands; the discomforts of irritating discharges and their attendant douchings; the risk of serious ulcerations into the bladder and rectum, of septic infection, and of the development of carcinoma as the result of retained pessaries, examples of which I have seen. If, by means of a safe operation, patients can be saved from all this, and if they desire such relief, surely they are entitled to have it. The radical cure of hernia is considered justifiable, to obviate the discomfort of constantly wearing a truss; why not then the radical cure of a uterine displacement, to obviate the necessity for the more obnoxious pessary. Well, the progress of abdominal surgery has opened up this field of relief to women and it has resulted in a wide relief of suffering and emancipation from disablement.

Passing on to the subject of inflammatory disease of the uterine appendages, we have to do with a somewhat graver condition, because, in a certain proportion of these cases, the patient is seriously ill, and we are called upon to operate in order to save life; and with the remainder, which forms the great majority, it is not a matter merely of obviating discomfort, but it is a question of saving women from prolonged illness, constant suffering, more or less complete invalidism and disablement. Some of these women, in the poorest classes, are the bread-winners, and for them disablement is a worse evil than death.

Now, as long as the operative mortality was high, these patients could not be advised to undergo surgical treatment; and up to twenty years ago the mortality ranged from 20 to 30 per cent. It is true that Lawson Tait as far back as thirty years ago (or, to be precise, in 1883) was able to record sixty-two cases without a death; and his results justified him in taking up a position far in advance of the current medical opinion of his time, and in saying "we could not stop short of dealing with matters that affect life only. Hydrosalpinx was a frequent cause of the most intense suffering, and therefore he would, and did, remove it by surgical operation without hesitation." By degrees, as the figures of the Chelsea Hospital for Women show, the mortality became lower and lower, the figures for five successive quinquennial periods being, 33.3, 13.6, 3.5, 3.3, and 1.3. It was not, however, on the ground of mortality alone that these operations met with opposition in certain professional quarters; it was objected that after these operations, patients remained chronic invalids, that they were unsexed and rendered unfit for wifehood, that they became, at the best, hysterics and at the worst, lunatics. These objections were chiefly theoretical; and two years ago I was able to show, from a detailed investigation of the after-results of these operations, based on two hundred cases in which both ovaries were removed, that 70 per cent. of the patients regained perfect health and vigour and retained their sex-instincts; that the legends of women developing bass voices and growing beards were pure romance; and that there was no more tendency to insanity after double ovariotomy than there was after any other abdominal operation.

Now, what happens to patients suffering from chronic pelvic inflammation who are not treated by surgical means? Here and there we may find a case where symptoms subside and health is more or less completely regained; but this is a rare event. Many of these patients swell the ranks of those who are unjustly described as hysterical and neurotic. How often it has happened to me to have a patient sent up with a letter saying that she exhibited marked neurotic tendencies; and on examination some chronic pelvic disease has been discovered. These cases have constituted in the past a great reproach to the medical profession; such patients often suffer intermittently; they are seldom acutely ill, but they are never completely well; and because there is not much to show for their sufferings, and because, on occasion, they are able to make an effort to appear as other women, they have been treated as neurotics and almost as malingerers; they have been drenched with bromides and valerian; they have been sent from spa to spa and soaked in brine-baths and mud-baths; they have been driven to seek relief in alcohol, morphia, or cocaine; or they have found a doubtful haven among the faith-healers and the Christian Scientists. I contend that we have no right to label any woman as neurotic, unless we can be certain that she has no organic disease; and even then we shall be wiser if we suspend our judgment.

Think of the amount of suffering saved, the workers that have been restored to the position of earning their livelihood, the relief to the community in the conversion of dependent invalids into sound and useful members of the body corporate; think of all this amount of good done as represented by the eight hundred and forty-one women who have been cured of diseased appendages in the last fifteen years at the Chelsea Hospital for Women. Then add to these the thousands of women similarly cured in other institutions all over the civilised world, and you will gain some idea of the good that has resulted from the decreased mortality of abdominal operations.

We come, thirdly and lastly, to the subject of fibroid tumours of the uterus. Here we have a condition more inherently dangerous than the other two, leading more often to a directly fatal result; and, short of a fatal issue, causing prolonged suffering and disablement. Here, again, we have a condition in which the operative death-rate must exert a marked influence on the advice that we give to our patients. Twenty years ago this operative death-rate was from 20 to 40 per cent.; and it is evident that it was only in cases where a fatal result was threatened that so dangerous an operation could be recommended. In the much larger majority of cases, there was no question of life being at stake, the reason for operation would be only the relief of suffering, and it is seldom that patients yearn for death or are willing to incur a very great risk, merely to be relieved of suffering. It is better, after all, to live as an invalid than to die cured. Now when a patient with fibroids has to be told that the resources of medicine are exhausted and that the succour of surgery is more cruel than kind, it is a great comfort to be able to hold out some kind of hope, however unsubstantial; and so a fairy tale was built up and decorated to represent a scientific theory, to the effect that the menopause was the natural cure for fibroids. And patients were told, in all seriousness and good faith, " You must wait for the change of life, and then these tumours will shrink and disappear and you will get well." And the patients went on patiently draining their life-blood away, carrying enormous tumours that prevented them from getting about, hoping against hope that the delayed menopause would arrive, like some millennium, to give them peace. Some of them survived the worst troubles and escaped with their lives, a few of them regaining a measure of health, and the remainder remaining more or less permanent invalids. Others found that the menopause, when it came, came not to bless but to curse, bringing in its train degenerative changes, infection, sepsis, and death. Now I do not know what is the state of current medical opinion in progressive Canada; but I can tell you that in some parts of the Old Country we find a tragic thing, and it is this: That while the operative conditions have revolutionised the death-rate of hysterectomy, causing a drop from 30 to 2 per cent., the hoary myth of the menopause is found to survive, even in high places, and patients are still condemned to years of suffering who might be quickly and safely cured. Look once more at the record of hysterectomies for fibroids at the Chelsea Hospital for Women; observe that in the last five years under consideration four hundred and eighty-seven operations were performed, with a mortality in all cases—serious as well as simple—of 1.8 per cent.; and I think that you will agree that I am justified in the contention that all fibroids should be operated upon (unless some weighty reason to the contrary can be shown) in the early stages, as soon as symptoms arise, and without waiting for the development of grave complications; and that, whereas in the early days hysterectomy had to be reserved for cases in which it was required for the saving of life, the progress of abdominal surgery has brought it within the scope of operations that are justifiably performed for the relief of suffering and for the restoration of health.

In bringing these somewhat fragmentary remarks to a close, it may be well to guard against one possible misconception. Let me then state explicitly that the fact that an operation is safe is not, in my opinion, a sufficient reason for operating, if a cure can be obtained by other methods. I have no sympathy with the attitude of mind of Tennyson's imaginary surgical enthusiast, described in the lines—

> " indeed, it was said of him
> He was happier using the knife than trying to save the limb."

On the contrary, I am not ashamed to admit that I have a feeling of reverence for the human body; and that, in my opinion, the only sanction that can be accorded to surgical interference is that which is derived from the conviction that life, health, or comfort must otherwise be sacrificed. Having made this surgical profession of faith. I feel bound to state my belief that, on the other hand, we are not justified in refusing surgical relief when health and usefulness are at stake, any more than we should be entitled to withhold the aid of surgery when life is threatened—provided always that the ratio of the operative risk to the risk of non-interference be accorded its proper weight and consideration. In other words, while the grave issues of life and death justify great risks, the lesser issues of health and infirmity warrant only slight risks. It has been my object to show that the development of abdominal surgery and the extension of its scope have enabled us to realise the harmonious adjustment of this ratio, and to place the resources of our surgical art, with ever-lessening risk, at the disposal of an ever-widening circle of humanity.

PULMONARY TUBERCULOSIS AND MEDICAL GYMNASTICS.

By FILIP SYLVAN, M.D.Berlin,

London.

I believe it is an accepted fact that to get consumption a certain special tendency is required, without which the tubercular bacilli cannot live in the lungs. What constitutes this tendency?

Looking at the principal symptoms of consumption, we find that one is a shortness of breath. The patient gets out of breath by any slight exertion. What does this mean? I venture to say it is a sign of weakness in the inhalatory power or in other words the (*tone*) tonic contraction of the respiratory organs is decreased. The muscles themselves may not be weak, but the breathing centres in the medulla or in the cortex are weak. From a clinical point of view, the centres in the cortex are of supreme importance, because according to the general rule the higher centre has always a greater influence on the lower centre. Therefore, if we can affect the centre in the cortex, this will automatically affect the centre in the medulla. Many writers Danilewsky, Unverricht, Krause, Horsley, Preobrazenski, Bechterew, &c.) have studied the cortical centres of breathing in animals. I believe the latest view is, what Bechterew (" Functionen der Nervencentra," 1911) found in apes, two cortical centres for breathing, one situated a little in front of the upper end of the sulcus præcentralis, the excitation of which causes an instant cessation of the breathing at inspiration, another situated in the frontal lobe, a little lateral and frontal of the above mentioned.

By excitation of the latter the breathing became more superficial and frequent. We may assume that in man the cortical centres for breathing are the same.

When the carbonic acid in the blood exceeds a certain amount, it excites the breathing centre in the medulla and increases the breathing. As regards the cortical centres these seem to have a more voluntary influence on the breathing; and to strengthen the inspiratory tone we must bring the effect to bear especially upon the first of the above-mentioned two cortical centres, which most probably can be regarded as being an inhalatory centre.

Several writers (Bechterew, &c.) during their experiments noticed the intimate connection between the motor and breathing centres.

The system of association-tracts constitutes the connecting link between one sensitive-motor centre and another, so, for example, from vision to the hearing centre, from smell to vision or from motor to breathing centre. If in two sense-centres of the cortex simultaneous or following excitations take place, then, by virtue of the existence of association tracts, only one of these excitations needs afterwards to be repeated to animate the perception in the other sense-centre. (Bechterew.)

Apply this rule in our case in the following way. Let the patient make a movement and let him inhale deeply at the same time. When he has been doing this for some time, as soon as he starts the movement, he will by virtue of the existence of association tracts, unconsciously breathe more deeply. Of course in practice it is not quite so simple. There are so many special points of great importance. It is not sufficient to let him go through only one exercise. He must in the same way combine the act of inspiration with the motor function of every muscle-group in the body, thus the patient will always breathe deeper as soon as he starts any kind of movement. To make the movement a resistance exercise (see books upon Swedish Medical Gymnastics), the effect on the cortical centres will be considerably increased and I conclude that it is principally in this way that the tone of the inspiratory centre is strengthened.

I may perhaps specially point out that when treating consumptives with gymnastic exercises all the rules of Ling's system (usually called Swedish Medical Gymnastics) must be very correctly followed, otherwise the result must fail. But also the above points must be closely kept in mind. I may here mention that long before I had the theory mentioned in this paper, I used gymnastic treatment for consumptive patients with very satisfactory results, but these results have been far exceeded by the results of the same kind of treatment since I directed the effect principally upon the strengthening of the inhalatory centre and affecting a hyperæmia in the lungs. I cannot here enter into details of the gymnastic treatment, but I have noticed that certain exercises are injurious at a certain stage, but can be used later on with advantage. The first and supreme rule must always be that the patient never has to make any effort, as this would have the contrary effect. Bechterew found that new or strong excitations had a lessening effect on the associative reflex. Therefore we must start with very easy exercises and only very slowly and gradually proceed to stronger ones.

A stronger inhalatory centre will, of course, bring about deeper breathing and so facilitate the taking up of oxygen by the blood, but in strengthening the inhalatory centre I have quite a different object in view, which I believe is of far vaster importance to sufferers from pulmonary tuberculosis. The researches of Kisskalt (*Archiv. für Hygiene*, Bd. XXXIX. p. 142) show that the development of bacilli is very often checked by venous hyperæmia. When the inhalatory power increases the inspiration will be done much stronger and deeper, and the air pressure in the lungs decreases, which results in a dilatation of the blood vessels and a hyperæmia which arrests the development of the tubercular bacilli. It is this same effect which is brought about by consumptives going up in the mountains; a decrease of the air pressure in the lungs, which results in a hyperæmia. This effect, however, passes off when the patient becomes acclimatised. But the effect of the gymnastic treatment (when properly carried out after here mentioned principles) is far greater than that of the lower air pressure in the mountains. Another great advantage is that the gymnastic treatment can be carried out anywhere.

E. Weber (*Archiv. für Anat. u. Physiol.*, 1911, p. 377) has shown that the excitation of sensitive nerves results in a dilatation of the blood vessels of the lungs. To this effect I give pétrissage of the back on both sides of the spine where all the nerves emerge from the spine.

Thus in two different ways I bring about a dilatation of the blood vessels and hyperæmia in the lungs. One might think that this would easily result in a hæmorrhage, but that is not the case; in fact, I have never met with one single hæmorrhage during the period of my treatment, although several of my patients had previously repeatedly suffered from hæmorrhages. I explain this by the fact that the gymnastic treatment has a good effect on the general nutrition and thus has a strengthening effect on all the organic tissue. Consequently a hæmorrhage does not occur so readily.

I consider the general effect of the gymnastic treatment to be of great importance; it increases the appetite and metabolism, and as long as the body has a surplus of nutriment no waste of lung tissue seems to take place. This is the reason why overfeeding is good for consumptives. In this connection I should like to point out that my consumptive patients did not put on any fat and the increase of their weight has been in some cases only 2 lbs., in other cases 4 or 5 lbs., during the time of treatment, but this very slight increase in weight corresponds to an increase in organic tissue, not in fat. I believe that a person who is quite healthy, and who eats normally does not put on any fat. Consumptives cured by gymnastic treatment do not, as a rule, put on any superfluous fat, and there is really no need for it.

For treatment of catarrh in the lungs, I make a tapping with the fingers and vibrations on the chest, during which the patient must breathe deeply. After the patient has been under treatment for some time, I add to the exercises a passive expansion of the chest. This must in the beginning be done very carefully, because often after pleurisy there are adhesions, and if these are too violently broken, inflammation and fever might result. If done carefully the adhesions become relaxed, and disappear in a short time.

As regards fever, I never met with any rise of the temperature after I had started the gymnastic treatment. It is in the nature of this treatment that it rather prevents fever. Fever, I believe comes on when the blood has not a sufficient supply of oxygen, but as the gymnastic treatment facilitates and increases the supply of oxygen, it is obvious that no rise in temperature is to be expected during the gymnastic treatment.

The explanation of the good effect of manual labour and exercise which has been used in many sanatoria is, in my opinion, that it stimulates the general nutrition (metabolism), and to a small extent it increases the breathing. Dr. Inman (*Lancet*, 1908, p. 220) explains the satisfactory results obtained from the system of graduated labour, saying that the work causes an inoculation of the patient by his own tuberculin. Dr. Paterson (*Lancet*, 1908, p. 216) supports this theory by the fact that after a rise of temperature, and therefore an auto-inoculation, patients were often better than before, and that patients who were not improving on a certain grade of work, did improve on harder work. His theory is that the harder work gives rise to an auto-inoculation, whereas the lighter work fails to do so.

I cannot agree with this theory at all. The fact that some patients improved on harder work and not on lighter work is to be explained in a much simpler and more probable way. The harder work made them breathe deeper, and the lighter work had no effect on their breathing. The amount of muscular exercise necessary to stimulate the breathing varies considerably with different persons. In other words, the patients who only improved on harder work, required a greater percentage of carbonic acid to stimulate the breathing centre in the medulla, and in this way they increased their inhalatory power to a small extent. But the effect of manual labour in this respect is quite insignificant, compared with the effect of gymnastic treatment carried out in the way and after the principles I have described.

The results of the gymnastic treatment as I have carried it out are the following. During the first week a patient feels easier in the chest, he can breathe easier and his appetite increases. During the second week in many cases there was a marked decrease of crepitation, and the patient could extend his chest better and felt generally much relieved. After the second week the progress depends upon many other circumstances, if the patient can have proper rest, or if he works, and what sort of a constitution he has. If a patient was at work when he came to me, I let him always continue his work as before, and the result was very satisfactory. As a rule if the patient was in the second stage of the disease, after about two months' treatment the physical signs of consumption disappear, the patient feels perfectly well and fit for work. As a precaution I have always prescribed a few exercises to every patient when he had finished the treatment, which he continued to do, at home, and usually after some time I examined him again to see that the result was lasting, and I am glad to say that it has been so in every case I have treated up till now. It is quite natural that I found patients with strong and good constitutions recovering very quickly, even in less time than two months. But if consumption was combined with neurasthenia, it took a considerably longer time to reach a complete recovery. The explanation of this fact I will spare till some other opportunity. In one case of infiltration of the upper left lobe and neurasthenia, the patient needed ten weeks to get quite well and as it is now six months since I finished the treatment, and he is still perfectly well, I consider the cure is permanent. Another case where all five lobes were in the second stage was cured in exactly two months, and it is now twelve months since the patient left me, and he is still perfectly well.

When a patient is in the third stage, it is difficult to speak of cure as the wasted lung tissue cannot be restored. But even in such cases I have been successful, so far that the patient gets practically well and fit for work. But the success in the third stage is of less importance, because when the gymnastic treatment has come into general use, the patient will not reach that stage. But I consider the fact of having been successful also in cases of the third stage to be a strong evidence of the correctness of my theory.

OPERATING THEATRES.

MIDDLESEX HOSPITAL.

Miliary Tuberculosis, Caries of Spine, Double Psoas Abscess and Appendix Abscess—Appendicitis—Death from Secondary Infection of a Pre-existing Psoas Abscess.—Mr. Sampson Handley operated on a boy, æt. 18, who had been admitted to the hospital with the following history:—The only previous illness was chicken-pox when two years of age; there was no history of tubercle in the family. Eighteen months ago the patient was working in a hay-loft in Canada, when he fell through a hole in the floor to a distance of 30 feet, and landed on his back. He rested for a week, and was then able to return to his work. Eight months after the accident he complained of a dull aching pain in the lower lumbar region, which was not so severe as to prevent him following his occupation—namely, that of a farm labourer. This pain continued until seven days before admission, when he attended the out-patient department of the hospital, and was given a plaster to be applied over the lumbar region, and the pain disappeared. Two days later he had severe pain round the neighbourhood of his umbilicus, which lasted for a few hours, and then was felt in the right iliac fossa. He vomited all food after taking it and had diarrhœa continuously until admission. On admission he was slightly cyanosed, with an anxious, pinched expression, pulse 84, temperature 97° F. The extremities were cold, the tongue dry, and covered with a thin layer of yellowish-grey fur; the abdomen moved on respiration, it was not rigid, but just internal to the anterior superior iliac spine could be seen a fulness, and a swelling was felt about the size of a small apple, which did not fluctuate, but was very tender on pressure. On examination per rectum the right side was very tender. Hot fomentations were applied over the iliac fossa and hot bottles put round the extremities. Five hours after admission the temperature had risen to 100.8° F. and the pulse to 100. Four hours afterwards the temperature was 102.6° F, and the pulse-rate had fallen to 88. The blood-count was 5,280,000 red, 13,000 white. An hour later the patient was taken to the operating theatre, and Mr. Handley opened the abdomen, using Battle's incision. Pus immediately escaped when the peritoneal cavity was opened. The appendix was found to be gangrenous and perforated near the tip; it was ligatured at its junction with the cæcum and removed; two drainage tubes were inserted and the abdominal wall sutured by means of through-and-through sutures. The patient was taken back to bed, continuous saline per rectum being given. A fortnight afterwards the tubes were removed and the patient made an uninterrupted recovery and was sent to Clacton Convalescent Home, the wound having completely healed. At this time nothing abnormal was detected in the region of the dorsal or lumbar spine.

Three months subsequently the patient was readmitted into the Middlesex Hospital under Dr. Pasteur with abdominal pain. On the following morning he was seen by Dr. Lakin, who sent for Mr. Handley and asked him to see the case, as the patient had previously been under Mr. Handley. Mr. Handley immediately recognised the boy. On examination a red, painful, tender swelling was found in the region of the old scar. He was at once taken to the operating theatre. An incision three inches long was made just behind the scar, and a large quantity of foul-smelling pus immediately escaped. On exploration with the finger a large cavity could be felt behind the peritoneum extending as far as the finger could reach. A counter opening was made just behind and two large drainage tubes put in. The bacteriological report was a pure culture of B. coli.

Owing to the temperature rising at night and falling in the morning, and as nothing surgical could be found to account for this phenomenon, Dr. Pasteur was asked to see the patient, but he could not detect any adventitious sounds in the lungs. Six weeks afterwards an exploration was made under $CHCl_3$ by Mr. Handley. An abscess cavity was found to be present in the right psoas muscle, a sequestrum of bone was removed, and a lumbar drain inserted. A fortnight later the patient was again seen by Dr. Pasteur, who said there was evidence of breaking down of both lower lobes. Two days subsequently the patient complained of frequent cramp-like pain in the limbs. There was no discharge from the lumbar wound, and the tube was removed. Later the man became delirious at night, his general condition became worse, and he died in a few weeks.

The *post-mortem* examination revealed the thymus considerably enlarged; all the mediastinal glands were also enlarged, but were not tuberculous. Both lungs, chiefly towards their bases, were the seat of numerous small tuberculous deposits, which were caseating. The pleura was adherent on both sides (recent adhesions). The mesenteric glands were enlarged. There was considerable matting and many adhesions of the intestines in the neighbourhood of the appendix operation; otherwise the intestines were normal. A psoas abscess was present on each side. The bodies of the 12th dorsal and 1st lumbar vertebræ were carious.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section of Obstetrics and Gynæcology.

Meeting held, Thursday, October 10th, 1912.

The President, Dr. Amand Routh, in the Chair.

A CASE OF HÆMATOCOLPOS, WITH REMARKS ON THE STRUCTURE OF THE VAGINAL WALL.

By R. Drummond Maxwell, M.D., F.R.C.P.

Abstract.

The patient, æt. 19, had been married a few months, and came to the hospital complaining of dyspareunia. There was no abdominal swelling, and the external genitalia were normal; the introitus vaginæ was closed by a thick, fleshy septum, and when pressure was applied to the hypogastrium this septum did not bulge at all. Rectal examination showed the presence of a large, tense, cystic, intrapelvic swelling, whose lower pole appeared to be about 1½ inch above the septum; it was about the size of the uterus at the twelfth week of gestation.

The physical signs suggested a hæmatometra, rather than a hæmatocolpos, and it was in consequence expected that some disorganisation of the tubes would have occurred. Laparotomy was, therefore, performed, but the uterus and appendages were found to be perfectly normal. The supra-vaginal cervix was slightly dilated, and disappeared into the tense, cystic mass. The abdomen was at once closed, as it was recognised that the condition was retention in the upper two-thirds of the vagina, the lower third not being canalised. Guided by two fingers in the rectum, an incision was made with scissors closely following the floor of the urethra, into which a sound was inserted. After blunt dissection upwards for about 1½ inch, the lower pole of the swelling was reached. Before opening this it was freed from the para-vaginal cellular tissue, to enable a tube of it to be drawn down and stitched to the introitus. A little more than a pint of unusually thick tarry fluid was evacuated, and the circular edge of the tube was drawn down so as to project beyond the vulva. A thin strip of tissue was removed from both the anterior and posterior vaginal walls for microscopic examination.

The hymeneal tissue showed the typical appearances described by Blair Bell. The vaginal wall was covered by epithelium, consisting partly of stratified cells and partly of high columnar richly muciniferous cells. In some places the columnar cells are superimposed on several layers of stratified epithelium; in other places the columnar cells are being shed so as to allow the stratified epithelium to appear. This appears to negative the view that the stratified epithelium spreads upwards from below and replaces the columnar cells, but suggests that the Malpighian layer of the skin first produces columnar muciniferous cells, and later on a stratified layer. The author suggests that the initial function of the columnar layer is to canalise the vagina by pressure from its mucin secretion. Several pseudo-glandular crypts, lined by columnar cells, and a few definite racemose glandular spaces, were also found.

The paper was discussed by Dr. Russell Andrews, Dr. Spencer, Dr. Stevens, Dr. Eden, Dr. Griffith, and the President.

ON GELATINOUS GLANDULAR CYSTS OF THE OVARY, AND THE SO-CALLED PSEUDO-MYXOMA OF THE PERITONEUM.

By Thomas Wilson, M.D.Lond., F.R.C.S.Eng.

Abstract.

Certain glandular proliferating cysts of the ovary are made up of solid jelly-like material in a multitude of small loculi with delicate transparent walls, which are prone to rupture and allow a free escape of the gelatinous contents into the peritoneal cavity. Here the gelatinous substance adheres closely to the parietal and visceral peritoneum, and even finds its way on to the upper surface of the liver, spleen, and stomach; the omentum usually forms a very thick, hard plate. Such cases were formerly known as colloid cancer of the peritoneum or ovary, and may be conveniently termed pseudo-myxoma of the peritoneum; they probably form 2 to 4 per cent. of the cases of ovarian glandular cysts.

Firm gelatinous cysts of the ovary that have not ruptured are also met with; but these are found usually in single and nulliparous women under 40, while true pseudo-myxoma is found most frequently in married multiparæ between the ages of 40 and 60.

The onset, symptoms, and physical signs of pseudo-myxoma of the peritoneum do not differ notably from those of the ordinary glandular ovarian cyst, and in none of the six cases here related was there any symptom or sign of previous perforation or rupture of the cyst wall; neither was the peculiar nature of the ovarian affection suspected in any of them until the abdominal incision was made.

The affection of the ovary is unilateral, the pedicle usually well formed, the Fallopian tube and mesovarium generally unaffected. The gelatinous substance contains pseudo-mucin, the cysts are lined by a single layer of typical secreting epithelium. The parietal and visceral peritoneum in contact with the effused jelly may be unchanged, but usually shows signs of chronic irritation due to attempts to absorb or encapsule the gelatinous substance. In a certain number of cases true implantation metastases with living and active secreting epithelium are found either on the surface or in the spaces of the subserous tissues. In one case seen in the *post-mortem* room, and apparently belonging to this group, a large, gelatinous, metastatic growth was found in the middle lobe of the right lung.

The treatment, formerly very unsatisfactory, appears to have improved considerably of late years. Paracentesis is useless and highly dangerous. The most important point is to remove the gelatinous material as completely as possible, and this is best accomplished by copious flushing with normal saline solution, which causes the jelly to swell up and become loosened from its attachment. Even in favourable cases the prognosis as regards freedom from recurrence must be doubtful, since small collections with living epithelium may lurk unobserved in some of the recesses of the peritoneal cavity, and burst into renewed activity after a longer or shorter time.

The notes of six cases are given, in one of which there were true metastases. Four of the cases have remained well after operation for periods varying from one to more than eight years. A chronological list of references is appended.

The paper was discussed by Dr. Russell Andrews, Dr. Munro Kerr, Dr. Herbert Spencer, and Dr. Eden.

EDINBURGH ROYAL MEDICAL SOCIETY.

Inaugural Meeting held Friday, October 18th, 1912.

The Vice-President, Dr. Ritchie, in the Chair.

This the 176th Session of the Society was opened with an address by Dr. Robert Hutchison, of London, a former member and President of the Society.

Dr. Hutchison, who was received with great cordiality by an excellent audience, said that it seemed only a week or two since he had been an active member, although actually twenty years had gone by since he joined the Society. He recalled Bacon's well-known adage that "reading maketh a full man, conference a ready man, and writing an exact man," and taking it as his theme he developed it in an interesting address on the place of such a society in the medical curriculum. In their splendid library they had ample material for reading, and there they ought to learn to read in the proper way—to get up information about subjects which they were really interested in for the time being. Next to being well read in a subject, came the ability to find out in what books the best information could be obtained. If the student learned nothing else than how to use the *Index Medicus*, he had gained a great deal. He thought that the student ought to depend largely on text books, and lesson journals, in his work. Ephemeral literature was rather dangerous fare. The older writers of last century ought never to be neglected. In reading them one missed, perhaps, the scientific treatment of to-day, but one gained a more practical view point than that induced by much of the present-day laboratory work; one came to see that many so-called new discoveries were in reality but old truths; and last one found that a text-book need not be dry, but might have charm and literary style. He also advised the Library Committee to consider the addition of a department of general literature, because the doctor of to-day must needs be a well-read man. The debates supplied the readiness of mind begotten by what Byron called conference. The doctor's work was, above all things, practical, and his knowledge was useless unless it was ready to hand in an emergency. Besides, now that the medical profession was consulted by public bodies as it never had been before, it was very essential that a doctor should be able to state his views concisely and clearly. The art of speaking could only be acquired by practice, such as the debates there afforded. It was their duty in these debates to theorise to their hearts' content. Later, they would find the mass of facts they acquired quite enough to weigh them down and stop undue theorising. Another most valuable qualification for a doctor which could be acquired at the meetings was the power of suspending the judgment until all the facts were known—and, lastly, they would learn, some of them at least, to bear with fools gladly. The writing of a dissertation, which was still a rule of the Society, was introduced at a time when the defence of a thesis formed part of the examination for a medical degree. These compulsory dissertations were, he believed, a most important feature of the Society's work. When they came to write them, they would often find, in the first place how little they knew of the subject, and, after the material was arranged and written out, they would have a lasting possession in the shape of a more or less complete mastery of some topic. In looking through old dissertations, he had been struck with how often a man's bent was determined by the subject he chose. Sir James Simpson, for instance, had written his dissertation on disease of the placenta. Lastly, he emphasised the value of the Society as a place of social reunion, and a nursery of life-long friendships.

Dr. Allan Jamieson proposed a very hearty vote of thanks to Dr. Hutchison for his very valuable address.

After the address, Mr. R. B. Simpson presented to the Society a gold medal which the Society had given to Mr. McFarlane, who was their Treasurer from 1828 to 1862. The medal had remained in Mr. McFarlane's family, and now the last survivor wished to return it to the Society for preservation and safe keeping.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Oct. 19th, 1912.

At the International Kongress für Geburtshilfe und Gynækologie,

The Surgical Treatment of Uterine Hæmorrhages in Pregnancy, Labour, and Childbed

came up for discussion.

Hr. Couvelaire was the first speaker, and he said that French obstetricians in cases of obstetric hæmorrhages adopt the non-chirurgical methods of arresting them. As far as chirurgical measures were followed at all they restricted them to cases in which the usual methods had proved themselves useless or were dangerous. Undoubtedly, chirurgical measures often gave quicker and more easily attained results. But the result of these, independently of the fact that they were not constant, included a certain maiming or diminution of capacity for reproduction on the part of the patient. With the exception in which surgical treatment was to be preferred one must acknowledge that improvement in therapeutical results was due less to an extension of groundless surgical methods than to medical treatment of pregnant women and the perfecting of the medical education of physicians and accoucheurs.

Hr. Jung, Göttingen, said that myomata that bled during pregnancy were always seated in the collum uteri. Here surgical removal was always indicated. If the myoma led to abortion, extirpation of the myomatous uterus was called for; it was to be preferred to a conservative treatment, as with that infection was liable to occur.

Carcinomata in pregnancy, when operable, were to be removed without any regard being had to the pregnancy. If not operable at the end of the pregnancy that patient was to be delivered, either through the vagina or by the classical Cæsarean section. In case of penetrating wounds of the pregnant uterus laparotomy should always be performed, and the uterus treated according to the condition met with. If necessary it should be emptied, if not, the wound should be closed by suture.

In case of separation of the placenta prematurely the patient should be delivered, and if this could not be done either by the forceps or turning after dilatation of the cervix, it would be best done by anterior colporrhaphy, that was if the pelvis was a normal one. In contracted pelvis some form of Cæsarean section was called for.

In the slighter cases of placenta prævia metreuresis was the procedure of choice. Cases of total placenta prævia should be treated by anterior colpohysterotomy, with contracted pelvis Cæsarean section would be called for.

Rupture of the uterus should in any case be treated surgically, it was best done by laparotomy; the uterus could then be removed or the wound closed by suture, according to circumstances. Suturing through the vagina could only be successful where the rupture was incomplete. Tamponade as an assistance in emergency should only be made use of in rare cases. In cases of atony contractions of the uterus could be excited by tamponade of the vagina. It was only when these means failed that rapid total extirpation of the uterus, either by the vaginal or abdominal route, came into question.

Myomata that gave rise to hæmorrhage during childbed were to be extirpated, either vaginally or through the anterior abdominal walls. Infected myomata were also to be removed. Carcinomata when operable were best removed through the abdominal walls. In other cases of extreme hæmorrhage from wounds, placenta prævia, atony, many cases could be saved by temporary compression of the abdominal aorta. Momburg's tube compression was at present the best procedure for compression of the aorta.

Hr. Rübsamen, Dresden, introduced the subject of

Post-Partum Hæmorrhage.

in a paper in which he reported on some experimental inquiries he had made into the matter.

In the first place he showed in a graphic manner that pituitrin given in the afterbirth period increased the activity of the uterine contractions in the sense of shortening of interval, causing the contractions to occur more frequently; ergotin on the other hand did not shorten the pause, but only strengthened the individual contraction. The uterus that was under the influence of pituitrin had scarcely any pause between the pains, and could not bleed; as the hæmorrhage occurred during the interval between the contractions, contrary to what occurred in the case of ergot. From this could be deduced the advantage of pituitrin in post-partum hæmorrhage.

Amongst other things he had determined that when pituitrin was given immedately after expulsion of the afterbirth the loss of blood was only about one-third of the normal amount—*i.e.*, as soon as the action of the pituitrin was seen in the curve the bleeding stopped. The determination of the amount of loss of blood was by Rübsamen's modified and improved method. When pituitrin was given some time before the labour the loss of blood was greater than the normal, but this could be reduced by again giving pituitrin after the expulsion of the afterbirth. He also mentioned a case of post-partum hæmorrhage from atony of the uterus in which pituitrin again did good service.

In placenta prævia the loss of blood was at once diminished after the expulsion of the fœtus by the use of pituitrin. In the Dresden Frauen Klinik, pituitrin was given in the cases of Cæsarean section immediately before the abdominal incision, when the loss of blood was reduced from the usual 1,300 grammes to 8 to 900.

No real distinction could be observed between the action of pituitrin and pituglandol. Nor could any connection be seen between atonic post-partum hæmorrhage and the clotting power of the blood.

AUSTRIA.

Vienna, Oct. 19th, 1912.

Syphilis and Salvarsan.

Hecht (Prague) gives his experience of the treatment of syphilis by excision, salvarsan and mercury in a large number of cases. From 80 so treated he records the history of 50 which he has had under observation for a very long time, and gives the following results. From eight of the cases treated by excision, salvarsan and calomel, he finds that they all remain symptomless for 16, 15, 8, 7, 6, 5 and 5 months respectively, and the Wassermann reaction was absent in all except two cases that were sometimes positive and sometimes negative. From 21 cases which had the Wassermann reaction negative 18 remained symptomless with one exception. Three recurred after ceasing the treatment in 2, 4 and 6 months respectively. Thirteen cases out of 21 which gave a positive sero-reaction after treatment of 14 and 16 months remained symptomless; in 11 of these the sero-reaction was negative. Eight cases occurred after 4, 4, 4, 5, 5, 6, 7, and 7 months, and in all but one the sero-reaction was positive. He found that the earlier the treatment was commenced the results were more favourable. With a negative commencement he found 10 per cent. out of 36 per cent. positive in recurrence. In the latter the mercury treatment was much more effectual than salvarsan, and the more intensive the treatment the better the results. Out of 26 energetically treated cases 4 only recurred, and the same may be said of those with a negative sero-reaction. In 24 indifferently treated 7 recurred. If these cases remained symptomless for eight months after the treatment is finished, with negative Wassermann's reaction we can confidently say that the abortive cure is accomplished.

After Hecht had closed, Oppenheim (Vienna) drew attention to the general reaction after the use of salvarsan in the character of erythema multiforme or erythema nodosum, sometimes assuming an inflammatory condition. He sometimes observed it in the energetic treatment with mercury, but not so often. He believed it was due to changes in the organism, and not to either salvarsan or mercury.

Marschalko recorded the case of a patient, æt. 38, into whom he injected intravenously 0.52 gramme, and who suddenly became ill with shivering, vomiting and general malaise, and on the fourth day after the injection became unconscious, with epileptic fits, and died on the fifth day. The *post-mortem* revealed punctiform hæmorrhage in the brain, especially on the surface.

Nephritis.

Martin Fischer, from his researches, advances the theory of the œdema of nephritis to be due to an acid condition of the system. This he affirms to be the primary cause of the nephritis, as the acid in the organism produces albuminuria with the development of the œdema. Handovsky has shown that the œdema which Fischer represented has nothing to do with the nephritis, as the œdema caused by the acidity is local and causes a swelling of the cells. If his theory were correct that the nephritis was the cause there must be swelling of the cells in the region of the œdematous fluid, which has as yet not been proved histologically.

UNITED STATES OF AMERICA.

Washington, Oct. 12th, 1912.

The International Congress on Hygiene and Dermography.

The fates favoured the meeting here of the fifteenth Congress of Hygiene and Dermography in everything but weather. Washington, the city in which the Congress was held, is one of the most beautiful cities and certainly almost the most beautiful capital of the world.

Washington, its Buildings and its People.

It has been truly called the city of magnificent distances, and perhaps is somewhat lacking in coherence, if such a term be applicable to a city. But it is for the most part scrupulously clean, with wide streets, and, of course, being the seat of Government, with many splendid buildings. Also Washington contains a very large number of parks, the majority of which are small and would in England be termed squares. Most of these parks have many statues, some of them appear to be nearly filled with statues. Washington is distinctly a residential city, and therefore the smoke, noise, and dirt incident to the presence of factories is absent. On the other hand, there is a large coloured population: out of a population of

330,000 or so almost one-third are coloured, and, as is invariably the case when negroes are present in large numbers in a city, there are slums and many wooden houses or huts. Washington, too, like the greater number of American cities, presents glaring contrasts in architecture. For instance, the small space between the Corcoran Art Gallery and the Building of the Daughters of the American Revolution, two of the most striking and modern buildings of Washington, is occupied by a congerie of particularly mean squalid-looking huts, mostly of wood and inhabited by coloured persons. On the whole, however, the coloured inhabitants of Washington are a credit to their race. Nowhere in America, perhaps, can be seen so many prosperous, well-educated members of the coloured race, and for politeness and general good manners they have nothing to learn from white people. One blot on Washington, a blot to be observed in most American cities and towns, is the bad paving of the streets and sidewalks. Between the Capital and the Congressional Library is possibly the worst piece of asphalte paving the writer ever witnessed. Again, as a rule the sidewalks are uneven and more or less full of holes.

The fates, then, favoured the meeting in that it was held in a beautiful city, and a city in which the hotel accommodation is excellent, but it was likewise favoured because of the strong personal interest evinced in its proceedings by President Taft. The President not only made the journey from Beverley on the morning of September 23rd in order to open the meeting, but delivered an eloquent and practical speech dealing with health matters, and in addition did all in his power to render the visit of the delegates to the meeting pleasant from the social point of view.

The Arrangements and Countries Represented.

The arrangements generally were very good, and supplied incontrovertible evidence that those responsible for these arrangements had used great foresight and judgment. This fact was strikingly exemplified in one detail. Books of abstracts of all the papers read were published in several languages, and what is more to the point, were ready to be given out before the first session opened. The attendance of delegates was immense, every civilised country of the world being represented. Never before, perhaps, such a galaxy of distinguished hygienists has been gathered together. Of the foreign contingents the German contingent was the largest by far, and was as great in quality as in quantity. Great Britain was well represented, while France, Austria, Italy, Russia, Norway, Sweden, Denmark, Spain, and indeed all European countries sent representatives worthy of their country and the occasion. Each country of South America furnished one or several delegates and Canada, Australia, and the British West African Colonies were represented. Among the well-known men who were present and took part in the proceedings were Dr. Karl von Noorden, of Vienna, Dr. A. C. J. Bornemann, Chief of the Medical Corps of the Danish Navy; M. le Dr. Chantemesse, of Paris, Principal Medical Inspector of the French Army, and M. Bertillon, Chef du Service de la Statistique Municipale de Paris.

Dr. Rurner, of Berlin University; Dr. Gärtner, of Jena University; Dr. Hoffmann, of the German Navy; Dr. Zahn, of Bavaria; Dr. Eugen Wurzburger, of Saxony; Dr. Pfeifer, of Hamburg; and Dr. His, of the German Central Committee for Travel Study. Great Britain was officially represented by Dr. Arthur Newsholme, Sir Benjamin A. Whitelegge, and Dr. Theodore Thomson. Australia by Dr. W. Ramsay Smith and Dr. Walter Summons; Canada, by Dr. Frederick Montizambert, Dr. Nadeau, and Major Lorne Drum; Ireland, by Alderman Thomas Kelly and Mr. Patrick Nally; Scotland, by Sir George McCrae. The British Universities and Associations were adequately represented.

Neither the British Army nor Navy was officially represented, in contrast to Germany and France. Of the several papers contributed on naval hygiene only two were read by British naval medical officers, while not one was contributed by an officer of the R.A.M.C.

If any criticism of the meeting can with justice be made it is that the programme was too long, not allowing time for discussion, which, after all, is the salt of such a conference.

Unfortunately, the weather conditions could scarcely have been worse. During almost the whole period of the congress rain came down persistently and pitilessly. From about eleven o'clock on the morning of the 23rd it rained for thirty-six hours without stopping, and although there were some intervals after of cessation yet throughout Pluvius dominated the situation.

(*To be continued.*)

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

EDINBURGH.

Scottish National Insurance Council.

At a meeting of the Executive of the Council held in Glasgow, the following resolutions relative to the working of sanatorium benefit, and to the provisional regulations issued by the Insurance Commissioners, have been passed :—" (i.) That the Executive of this Council make a strong representation to the Local Government Board for Scotland that the proposal which has been made in some places to appoint as chief tuberculosis officer the medical officer of health is opposed to the interest of tuberculous patients and the community generally, and should not be sanctioned, and the chief tuberculosis officers should be men experienced in the varying clinical manifestations of tuberculosis, who would be trusted by the profession to act in the position of consultants; that the Council further insist that patients enjoying sanatorium benefit at their own homes should have free choice of doctor. The Executive approve generally of the model scheme and scale of charges of the State Sickness Committee of the British Medical Association for treatment of tuberculosis, and commend it to all areas. (2) That the provisional regulations are not acceptable to the profession in Scotland. While admitting that they are, in the main, the logical outcome of the provisions of the Act, they serve to accentuate and render more obvious the difficulties of the medical service proposed under the Act. This Executive Committee further desires strongly to express its regret that no real attempt seems to have been made in them to satisfy the minimum requirements of the profession. (3) That it be a recommendation to the profession in Scotland to have nothing to do with the Act, as at present defined by the regulations for the administration of medical benefit." So many organisations have been formed in connection with the situation created by the Insurance Act, that it is worth while to recall the fact that the Scottish National Insurance Council represents in the fullest and most democratic way the profession in Scotland; that it possesses the entire confidence of 99 out of every 100 practitioners in the country; that it is composed of responsible, level-headed men, who have nothing to gain by opposing, for opposition's sake, the working of the Insurance Act; and that its deliberate opinion will carry in the future, as it has done in the past, immense weight in all medical circles throughout the country. Its uncompromising denunciation of the regulations as they are at present drafted expresses the very general opinion of those who have studied them in all their bearings.

Medical Service in the Western Isles.

The Highlands and Islands Medical Service Committee has recently held sittings in Skye and Lewis. In Skye it was pointed out that the doctor could not make a living by fees alone, with the result that the Parish Council had to pay a high salary ostensibly for attendance on paupers, but really to provide medical attendance not only for them but for poor non-pauper patients also. The need for better nursing, cottage hospitals, telephonic communication—the latter especially as a means of inter-communication between doctor and nurses—was emphasised, as also was the inability of the local rate to meet the cost of these and other aspects of the problem. In the island of Lewis, the parish of Barvas, with its population of 7,000 living in hamlets along a seaboard of 27 miles, was instanced as a difficult problem. There is but one doctor, whose work is added to by the frequent recurrence of epidemics of typhus and typhoid fever among the inhabitants. All the witnesses testified to the insanitary conditions of the houses in which treatment had to be carried on, in consequence of which infections have become endemic in certain townships. It was also pointed out that the doctor rarely gets a holiday. One interesting fact which came out was that over 4,000 Lewis men were being trained for home defence in the Royal Navy Reserve, the Militia, and the Territorial Force. All the medical witnesses bore testimony to the extraordinary improvement in the health of the people, especially the children, with the change from winter to spring, and the open-air life that leads to.

The Royal Medical Society of Edinburgh.—The inaugural meeting of this Society took place on Friday last, with an address by Dr. Robert Hutchison, of London. A report of the meeting will be found in another column, under the heading of "Transactions of Societies."

GLASGOW.

The Glasgow Cancer and Skin Institution held their annual meeting on Wednesday, October 16th, Mr. Thomas Lawson presiding, and the report was adopted. Dr. H. Murray stated that in the institution 815 patients were treated during the year. During the year there had been 25 deaths, the majority of whom were patients who had been operated upon, repeatedly seeking admission to the institution; 69 patients were discharged as being well from a total of 141 treated for cancer; 10 out of 18 patients discharged well suffering from lupus; and 14 from a total of 21 patients were dicharged well for tumours other than cancer; and of the remaining 635 patients with diseases of the skin and other ailments 501 were discharged well.

Reconstruction of Kilmarnock Infirmary.—The Directors of Kilmarnock Infirmary have agreed to carry out a scheme for the reconstruction of that institution at an estimated cost of £12,000. Arrangements are being made to raise the necessary funds by public subscription and otherwise, and the directorate are being advised on the remodelling of the buildings by Dr. Mackintosh and Dr. Burnett, architect, of Glasgow. A sum of £4,500 has been already promised, which includes four donations of £1,000 each from local gentlemen. To enlist the sympathies of the general ratepayers, Mr. George Clarke, one of the Directors, and Mr. William Austin, the Secretary, attended the various ward meetings held in connection with the forthcoming municipal elections, when the subject of extension was laid before the assembled congregation.

An Important Appointment.—Dr. Ernest Watt, M.D., B.Sc., D.P.H., Medical Officer of Health for the Burgh of Partick, Glasgow, and Superintendent of Knightswood Hospital, has been successful in securing the appointment of Chief Tuberculosis Officer for the County of Durham at a salary of £500 per annum. Dr. Watt was assistant to Professor Glaister in the Public Health Laboratory of Glasgow University, where his kindly and considerate attention was greatly appreciated by his professional brethren with whom he came in contact, and who wish him every success in his new enterprise.

BELFAST.

The Medical School.—The winter session of the Belfast Medical School was opened last week, when lectures began at the university, and clinical teaching at the various hospitals. As far as can be judged, the entry of new students is a large one. At the Royal Victoria Hospital an introductory address was delivered by Dr. Thomas Houston, who is head of the department for hæmatology and vaccine therapy. Dr. Houston traced the rise and progress of his speciality, and showed the great influence it has had on modern medicine, and its present importance.

Medical Salaries at the Belfast Union.—The recently formed Belfast Medical Guild has boldly tackled the subject of medical salaries at the Union, and at the last meeting of the Guardians a letter was read from Dr. George Elliott, the honorary secretary of the guild, stating, first, that in the opinion of the council of that body no qualified medical practitioner should accept less than five guineas per week when acting as *locum tenens* to any dispensary appointment, and second, that the minimum salary for a qualified resident medical practitioner should be £130 per annum, with board and rooms, giving suitable accommodation for the position he holds. In support of the resolutions, he pointed out that the cost of a medical education had been more than doubled in recent years, and that the standard of education had been greatly advanced. Within the last few weeks, he added, a practitioner while acting as *locum tenens* in Belfast, paid 410 visits, vaccinated 16 children, and attended three confinements, all for the sum of £5 11s. This worked out at the rate of 2.92 pence for the visits alone, much less than a barber received for cutting a man's hair! At the same meeting a report was received from a committee appointed to inquire into the conditions of resident medical appointments under the Board, and they reported that after conference with the visiting medical officers, they agreed that in order to induce a suitable class of men to apply for these positions it would be necessary to make the positions more attractive from a professional point of view. To attain this end the committee advised that a system of rotation be adopted, so that resident medical officers would go from one post to another, so gaining wider experience, and also that canvassing for the posts should be forbidden. The question of salaries having been raised, it was decided to refer the matter to the Infirmary Committee to obtain information from other unions. No doubt the action of the Medical Guild will have an excellent effect in strengthening the hands of those members of the Board of Guardians who wish to improve the status of the resident medical staff.

Death of Dr. Clarke, Tempo.—One of the senior practitioners of Co. Fermanagh, Dr. Adam Clarke, of Tempo, died last week at the age of 67. For the past forty-four years Dr. Clarke had held the position of dispensary medical officer for the Tempo district, and he was a most popular man in the whole country around. His special interest was in the Orange Institution, of which he was a prominent and enthusiastic member.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

EXTRA-MEDICAL SYPHILIS: A REVIEWER REVIEWED.

Sir,—In your issue of October 2nd a review appeared of Vol. VI. of the "System of Syphilis." Your reviewer falls foul of Sir A. Keogh and Col. Melville. Having had the honour of association with Colonel Melville in the production of a recent paper in the *Lancet* on the subject of venereal disease, I may be excused if I enter a protest against what I consider abuse of a reviewer's privilege. He seems—if I read it aright—to imply that Sir A. Keogh's introductory remarks are traversed by Col. Melville. In fact, the two passages referred to are in entire harmony. Sir A. Keogh says (p. 19).:—

> "If the C.D. Acts were successful they might be justifiable, degrading as the execution of the provisions must be to the police who have to enforce them, and the medical men who have to carry out the examination they prescribe. That they are not successful the experience of the Continent proves. . . . . For good or for evil, Great Britain has taken

up the line that there shall be no invidious regulation, discriminating against one sex only, where both are equally guilty, ... and no discrimination between rich and poor. . . . . That the decision has been taken for good, I steadfastly believe. We can point to the statistics of our army to prove it."

The statement is one of fact; the opinion may be right or wrong, but it is entirely free from cant or prudery. . On p. 40 Col. Melville says:—

> "At least it is certain that the young British soldier is not naturally five times as immoral as the German of the same age, or six times as wicked as the young Bavarian. There are two possible explanations: (1) England and America are the only two great countries where some form of C.D. Act or other is not in force; (2) they are the only two nations which still rely upon the voluntary method of recruiting, with its natural corollaries of greater leisure . . . . and higher pay."

Your reviewer quotes (1) as if it were accepted by Melville as the cause of the greater prevalence in the British Army, whereas in fact Melville rejects it in favour of (2).

Melville is taken to task for objecting to the system of distributing "prophylactic kits." Does the critic approve the method? To my mind it is both short-sighted and revolting. It is ruinous to the self-respect of the men who receive or distribute them, and of the officers who teach their use. To your reviewer such a moral attitude is foolishness; yet ethical considerations are necessarily bound up with any statesmanlike view of the problem of venereal disease. No blame to the doctor who sticks to his doctoring; but no blame either to the doctor who wishes to be a statesman too.

But I suspect that your reviewer, like many others, in and out of the medical profession, has a secret hankering after the Continental method of State regulation of vice. Some such enactment, they think, would in time exterminate venereal disease, if only British prudery would cease from troubling. Let those who hold this view study Co. Melville's army statistics for the last 70 years; let them read the accounts of the Brussels Conference of 1899 and 1902, with Professor Gailleton's summary verdict on State regulation: No good at all. If State regulation be a good thing for the nation, let them come out into the open and unfold its virtues; it has had trial for 100 years and ought to have something to show.

What, the reviewer asks, has Sir A. Keoghs' criticism of the C.D. Acts got to do with the prevention of V.D.? Every thing. The C.D. Acts were passed exclusively with this object. They failed; and yet a discussion of their failure is irrelevant!

No system of syphilis can be complete without explaining and appraising the various methods which have been devised to rid society of the scourge. This is what Col. Melville has done, at least with some success.

The cobbler to his last; the doctor to his microscope; the clergyman to his Bible; the reviewer to his review. Yet righteousness, cleanness and truth are the affairs alike of all.

I am, Sir, yours truly,
Douglas White, M.D.

Harrow-on-the-Hill,
October 21st, 1912.

[We have referred to the review alluded to by our correspondent and fail to trace in it any abuse of the legitimate functions of a reviewer. The writer enters a strong protest, it is true, against the introduction of non-medical phases of the subject in a purely medical book. We agree with him in thinking it best in such a work to avoid the discussion of highly controversial ethics that lie outside the immediate professional sphere of labour.—Ed. M.P. and C.]

THE MEDICAL SOCIETY OF LONDON AND PROFESSOR TH. KOCHER.

To the Editor of The Medical Press and Circular.

We have been asked by the honorary secretaries of the Medical Society of London to give space to the following letter, which we gladly do:—

The following letter has been received by the Medical Society from Professor Th. Kocher, in reply to an address of congratulation from the Society on the occasion of the celebration of his forty years' professorship at the University of Berne.

To Dr. Mitchell Bruce, President of the London Medical Society and Members.

Dear Mr. President and Gentlemen,—It was a pleasant surprise to receive the address handed me by your distinguished representative, on the occasion of the jubilee of my forty years' professorship, and it will always be to me a most valued possession.

Your society was one of the first to recognise the importance of my publication on the Thyroid Gland, and one of the first to confer upon me the Honorary Fellowship at a time when I had little reason to be well known, and it is for this I owe you my warmest thanks.

May your society, whose efforts are directed in such an eminent and influential manner, continue to flourish to the advancement of medical knowledge and to raising the standard of the medical profession.

Please accept, Mr. President, Officers and Council of the London Medical Society my most cordial thanks, and assuring you of my respect and esteem.

Yours truly,
(Signed) Th. Kocher.

P.S.—To Professor Sir Victor Horsley, who came so far to bring me the address and to greet me on my anniversary, I owe my personal thanks.

NATIONAL INSURANCE REMUNERATION—A WARNING.

To the Editor of The Medical Press and Circular.

Sir,—The *Times*, in announcing the publication of the regulations framed by the Insurance Commissioners, points out that they are of a technical character, and states that the remuneration which the Government is willing to pay per head is not announced. Therein lies their snare!

Upon referring to Clause 28 it is apparent that any figure which may be announced is not the amount which the doctors will actually receive. On the contrary, the pooled capitation fees will have to bear large deductions before they will be available for the purpose of medical remuneration. These deductions fall under three heads:—

(a) For drugs and appliances;
(b) For mileage;
(c) Cost of medical benefit for insured persons who are away from home.

The charge under (a) must be a heavy one. The chemists are to charge according to each item (which is right and proper), and it is unlikely that the sum required per head will be less than about 3s. 6d., which is the figure arrived at by comparison with twenty-five years of German experience

For mileage a varying sum must be set aside, a small proportion for a county borough, and a large one for a sparsely populated and scattered area.

The charge under (c) would depend upon the nature of the population, and would vary considerably.

In addition to these it is clear that there would be other charges on the fund for the special services as defined in Schedule 1, part 2; and for those beyond the competence of an "ordinary practitioner." (Schedule 1, part 1, section 2.) These would include laboratory investigation, for which no other provision has been made.

Deduct the charges for all these items from the agreed capitation fee, and there remains the sum available to pay the doctor. Could any arrangement be more unsound?

I am, Sir, yours truly,
J. Webster Watts,
Secretary, National Medical Union.

THE POSITION OF DENTISTRY.

To the Editor of The Medical Press and Circular.

Sir,—Your correspondent, "An Interested Observer," cannot have read my letters with sufficient care. They are perfectly clear, and I do not think I ought to take up your valuable space by repetition of their facts and arguments. The only unregistered practitioners who can practise dentistry in what your correspondent calls an "ethical" fashion are such as make known unequivocally to all their customers that they lack any legal qualification. It will be hard to produce many who do this. They nearly all pretend to be legally qualified, and the worst pretenders are the unscrupulous quacks who are out only for plunder. The mischief wrought by those who may be merely ignorant is well illustrated in the letter by my old pupil, "A Country Dentist," in your last issue. Cases such as he relates exist by the ten thousand among the less wealthy and the poorer classes. The practice of dentistry by the class of practitioner whose cause "An Interested Observer" champions is inflicting serious injury upon the public health; it is largely both fraudulent and cruel, and ought to be put an end to. If dentistry were properly protected there would soon be a great influx of qualified men, and it would be possible to institute a State service under the Insurance Act, or by means of provident dispensaries. Practice under false pretences for years unchecked in consequence of failure of legislation intended to prevent it, does not constitute any vested interest or valid claim to protection, and when new legislation is constituted it should become impossible for any save truly "ethical" practitioners to assume titles, or in the remotest way pretend to hold a professional position. This, I may repeat, has been done for the lawyers, it has been done for the veterinary surgeons; it can be done for doctors and dentists.

I am, Sir, Yours truly,
A Hospital Dentist.

October 17th, 1912.

To the Editor of The Medical Press and Circular.

Sir,—Whilst thanking you for the service you are doing to our cause by publishing this correspondence, and your excellent editorials anent it, I would like to express my opinion that the views of "A Country Dentist" are somewhat pessimistic with regard to the prospects of men entering upon the practice of dentistry. If masters of their work and really good operators, which I agree with "A Country Dentist," is the most important thing of all, and if they have tolerable personal qualifications, without which failure must often overtake them, I think the young dentist starting in life has a chance as good as that of the average medical practitioner of making a decent livelihood. He must take care not to start where there are already too many qualified men in the field. He has the immense advantage nowadays of being received as a professional brother by medical men whether he posseses merely a dental diploma or a full qualification. And it needs the support only of one or two family doctors in fair practice to set the young dentist going. No advertisement can be so good as the recommendation of a doctor. In no branch of practice does the patient more easily recognise the good he has got from clever services than in dentistry. Nearly every patient made comfortable becomes a walking advertisement. There is not a supply greater than the demand for good dentistry; more and more are the intelligent public learning to appreciate it. I agree with your correspondent and sympathise with him with regard to the question of social status. A medical man, a "doctor," is accepted in society as an educated gentleman, and can maintain that position if he has real personal claim to it. It matters not whether or no a dentist has the highest qualification, such as F.R.C.S. or a University degree, he comes on the social scene as a mere dentist, and is in danger of being looked at askance as one of the gentry whose show cases of artificial teeth adorn shop windows in the High Street, and whose illiterate, mendacious advertisements appear in the local papers, and it is not always easy to live down consequent prejudice. Protection by law would do much to redress this grievance and to induce more men of sensitive character to join the speciality. I agree with all those who maintain that it is of far greater importance to the public than the profession that medical laws should be made efficient in every department in accordance with the intention of the legislature; and if called upon to give evidence in a Government inquiry I could add my testimony to the facts with regard to the injury and suffering now being inflicted upon the poorer classes by the ignorant and unscrupulous practitioners to whose mercies they are mostly left. It is to be hoped that the Select Committee on quack medicines now sitting may be followed by one on unqualified practice, and that dentistry will be included. This seems to me the necessary preliminary to new legislation. The freedom with which your correspondents have expressed their opinions is, I am in some degree sure, due to the fact that you have allowed them to veil their identity. I enclose my card and beg to be allowed to subscribe myself

Yours truly,
Another Country Dentist.

October 18th, 1912.

To the Editor of The Medical Press and Circular.

Sir,—The position of dentistry is precisely the same as that of the whole medical profession of which it is a legally constituted branch. The clauses of both Medical and Dental Acts specifically devised to confer some scant privileges upon qualified practitioners, and to safeguard the interests of the public against fraudulent imposture have been declared impotent for their purposes by the supreme Court of Law. In giving judgment the Courts have on several occasions expressed regret that they were constrained to interpret the Acts in accordance with their letter rather than their obvious spirit. The whole lamentable situation seems due to the bad drafting of the Acts, and its long continuance to the lethargy of the Medical Council, and the apathy of the profession. Inspired by a kind of lofty altruism, the whole medical profession has, to a very great extent, left its worldly interests to take care of themselves. The legislature has accordingly always paid little regard to those interests, and, for example, in the Insurance Act, has treated medical men like so many sordid hucksters rather than members of a true profession living as a mass up to a high ethical standard. This attitude of the profession has unfortunately led to the creation or aggravation of evils which are inflicting grievous injury upon the public, and, if only for the sake of the public, it is surely time that an effort were made at least to establish and force to the front the full case for medical law reform.

I am, Sir, yours truly,
G. S. B.

Manchester, October 12th, 1912.

OBITUARY.

DR. ANDREW DUNCAN, OF LONDON.

We regret to announce the death of Dr. Andrew Duncan, of Chester Street, Grosvenor Place, S.W., which took place on the 18th inst., at a nursing home, aged 62. The deceased, who was the son of the late James Duncan, M.B., qualified as M.B.Lond. in 1874, taking gold medals in medicine and midwifery, studying at King's College, London. He obtained the gold medal in surgery at the B.S. in 1875, becoming M.D. in the same year. He took the F.R.C.S.Eng. in 1877, and was elected F.R.C.P.Lond. in 1907. Dr. Duncan had a most distinguished career at King's College, where he was House Surgeon and Surgical Registrar. Afterwards he held similar appointments at the Seamen's Hospital, Greenwich, and at the Public Dispensary, Carey Street. In 1875 he obtained the post of Medical Registrar of Charing Cross Hospital, and two years later he became Medical Tutor and Pathologist at St. Mary's Hospital. He soon began to interest himself in tropical diseases, joining the Indian Medical Service, of which he was late Lieut.-Colonel in medical charge of the 2nd Battalion 2nd (R.E.O.) Goorkha

Rifles. On returning to England he became Physician to the Westminster General Dispensary, subsequently accepting the post of Physician to the Seamen's Hospital and Lecturer in Tropical Medicine at the London School of Tropical Medicine. He also lectured upon this subject at the Westminster Hospital, and was an Examiner at the University of London. In 1886 he published his "Prevention of Disease in Tropical Campaigns" and "Guide to Nursing in the Tropics." He also contributed numerous articles on tropical diseases to Quain's "Dictionary of Medicine," as well as to the medical journals.

DR. WASHINGTON EPPS, OF LONDON.

The death took place last week, at his residence in Wellgarth Road, North End, Hampstead, of Dr. Washington Epps, of Queen Anne Street, W., in his sixty-fifth year. The deceased, who qualified as L.R.C.P.Edin., and M.R.C.S.Eng., in 1871, received his medical training at University College Hospital. He was well known in homœopathic circles, and he was consulting physician to the London Homœopathic Hospital, a Fellow and late president of the British Homœopathic Society, and was formerly medical director of the Royal Jennerian Vaccine Institute. He was a man of strikingly handsome appearance, of which studies had been made by several well-known artists, including the late Sir Lawrence Alma-Tadema. Dr. Epps was the subject of Sir Lawrence's popular portrait picture, "My Doctor," exhibited at the Royal Academy in 1887. He was brother of the late Lady Alma-Tadema and of Mrs. Edmund Gosse. He was the author of a work on skin diseases, which reached its fourth edition, and contributed several articles to medical journals.

MR. W. INNES ADDISON, GLASGOW UNIVERSITY REGISTRAR.

Mr. William Innes Addison, Registrar of Glasgow University, died, aged 55 years, suddenly at his residence, 2 Florentine Place, Hillhead, Glasgow, on Tuesday night, October 15th, and was interred in the Western Necropolis on Friday, October 18th. Until a few days before his death, Mr. Addison appeared to be in his usual health, and though at the beginning of the week he was not feeling well the symptoms were not regarded as serious. On Tuesday afternoon he left the office at the University at five o'clock, taking with him some work to do at home, but died late the same evening. Mr. Addison was born in the parish of Brechin, and after early school days, studied law at Edinburgh University and Arts at Glasgow. He served his apprenticeship in Brechin and then went to Edinburgh as a clerk, afterwards coming to Glasgow in the same capacity, and in 1881 was admitted a Notary Public. In 1887 he was appointed assistant clerk of Senate of Glasgow University, and in 1905 he became Registrar of the General Council, which offices he held conjointly until 1911, when he became Registrar of the University. Mr. Addison took a keen personal interest in his duties and in all matters pertaining to the University, and published several works which are of great value as books of reference, which include a Roll of Graduates of the University of Glasgow from December 31, 1727 to December, 1897, with short Biographical Notes, 1898, and the Snell Exhibitions from the University of Glasgow to Balliol College, Oxford. At the time of his death he had practically completed "The Matriculation Albums of the University of Glasgow from 1728 to 1858," a volume containing a verbatim transcription of the matriculation albums for the period mentioned. He also contributed numerous articles and sketches to various periodicals and newspapers.

To all students of Glasgow University both past and present, the news of his death will have come with a tragic suddenness and will carry with it a sense of personal loss.

Dr. T. B. MORIARTY, CORK.

We regret to note the death of Dr. T. B. Moriarty of Cork, which took place on the 15th inst., at the age of seventy-five. Educated at the Queen's College, Cork, and Trinity College, Dublin, he obtained his M.D. in 1860, and shortly afterwards entered the Army Medical Service. He served with Lord Wolseley in the Ashanti and other African campaigns. He retired nearly thirty years ago, and has since practised in Cork, where among other appointments, he held the posts of surgeon to the Cork Prison, and physician to the Cork Fever Hospital. He was held in much respect, not only in Cork, but throughout the south of Ireland.

MR. G. F. BLAKE, DUBLIN.

The sudden death occurred recently of Mr. G. F. Blake, J.P., for many years Registrar of the Royal College of Surgeons in Ireland. In his younger days, Mr. Blake was associated with the late Dr. Jacob in the conduct of this journal, but the greater part of his life was spent in the service of the Royal College of Surgeons. His official duties brought him into contact with many generations of medical students. By them, as by the Council of the College, he was held in the highest respect, and on his resignation last year he received many good wishes for a prolonged and happy life.

SPECIAL REPORTS.

REPORT ON ISOLATION HOSPITALS. (a)

This report gives the results of an inquiry completed in 1911, into the cost of construction of isolation hospitals. It may be regarded as a supplement to the late Sir Richard Thorne Thorne's report of 1882 which was reprinted in 1900 with a preface, giving information up to that date, and it includes detailed comparisons of some two dozen isolation hospitals of various sizes.

The first thing we note is that these hospitals are expensive necessities. Their constructional cost works out at an average of £400 per bed for a hospital of medium size, while in certain cases £800 has been exceeded, and this cost is increasing on account of the higher price of labour and materials and the desire of local authorities to provide more efficient accommodation. The higher extremes of cost are due to one or more of several factors. The hospital is often a small one—one bed per thousand of the population is a rough working estimate—and in such a case the total cost is divided among a very few beds. The selection of the site presents grave difficulties. The erection of an isolation hospital is objected to on grounds of sentiment, fear of infection, or depreciation in value of neighbouring property. These factors limit the authorities in their selection, and force them to give an enhanced price, or to buy a site much larger than is necessary. When the site is obtained it may be remote from sewers, water and light, and the expense of supplying these and often of making roads and carting materials adds greatly to the constructional cost.

The report emphasises the importance of small districts combining for the purpose of building an isolation hospital with the advantages of economy in avoiding duplication of a site, fencing, water supply, and administrative buildings, and of facilitating the classification of patients in respect of the diseases from which they may be suffering.

As isolation hospitals are regarded primarily from the point of view of sanitary defences, and as their functions of relieving sick individuals and of freeing the public from the loss and inconvenience consequent on the retention of an infectious case in a house or institution are held to be of much lesser importance, it follows that such a hospital must be kept in constant readiness, for if preparation has to be made on the discovery of an outbreak of infectious disease the time when the hospital would have been of most service is past.

The report is clear, adequate, and interesting, and lays down in no uncertain voice the requirements of the Local Government Board on all questions that may concern a local authority which contemplates the provision of accommodation for coping with infectious disease.

(a) "Supplement in continuation of the Report of the Medical Officer of the Local Government Board for 1910-1911, containing a Report on Isolation Hospitals by H. Franklin Parsons, M.D." H.M. Stationery Office. 1912. Price 1s. 7d.

MEDICAL SERVICE IN THE SCOTCH HIGHLANDS.

Our Edinburgh Correspondent has briefly referred in another column to the difficulties attending Medical Service in the Highlands and remote islands of Scotland Below we have pleasure in publishing a fuller description from another correspondent on the spot, which we think will be read with interest :—

The difficulty of obtaining medical aid in this out of the way Isle has been somewhat stimulated by a visit paid to the west side of the island on the 12th October by the Highlands and Islands Medical Service Committee for the purpose of taking evidence at Garrynahine from witnesses who represented the parish of Uig. This extensive parish, which is cut up by long arms of the sea, and in parts very rough and mountainous, has only one doctor for 4,500 inhabitants, and of these 700 are resident in the remote island of Bernera. Dr. Victor Ross and Mr. MacDonald, chairman of the Parish Council, along with other residents, very clearly set before the Committee the great difficulty of providing efficient medical attendance under such circumstances.

On Monday, October 14th, another meeting of the Committee was held in Stornoway, at which witnesses were heard from the parishes of Lochs and Barvas. Amongst those who gave evidence was Dr. Cameron, Lochs; Dr. Ross, Barvas; and Mr. Smith, chemist, Stornoway. Lochs from its geographical position presents difficulties quite as formidable as those of the parish of Uig, with a much larger population depending on one doctor. The parish of Barvas has a population of nearly 7,000, who live in hamlets scattered along a seaboard of twenty-seven miles, and there is but one doctor. To add to the difficulties of this parish, and which applied more particularly to this parish, was the frequent recurrence of typhoid and typhus fever, which in recent years has been a heavy burden on the medical attendant.

All the witnesses testified to the unsatisfactory conditions as to housing and sanitation under which medical treatment had to be carried on, and to the necessity of improvement in these conditions as a preliminary to the effectiveness of any medical provision. It was shown that in some of the townships infectious diseases had become endemic. In the evidence it was proved that the medical attendant rarely gets a holiday, which was detrimental not only to himself, but also to the people he served.

The medical witnesses gave evidence of the extraordinary improvement in the health of the people with the advent of spring and summer, and in the case of the children more particularly with the change to life in the open. In the case of the children there was evidence in recent years of physical deterioration, which in part could be ascribed to underfeeding, to the use of artificial foods, and to indulgence in over-brewed tea, which also affected their elders.

From the evidence it is apparent that there is urgent need of educating the mass of the population to realise the value of medical attendance in the early stages of sickness and disease and of systematic care in personal and household hygiene.

On Wednesday, October 16th calling at Harris, two local doctors and members of the local public bodies were examined as to the medical wants of that district, and continuing the inquiry at Lochmaddy, North and South Uist, where some of the witnesses were in favour of the compulsory levy of a medical rate locally.

The Procurator-Fiscal for Long Island, Mr. Chisholm, who had intimate acquaintance with the island through a thirty years' residency, thought the present medical service was inadequate, but that the locality was too poor to stand heavier rating than at present. Mr. Chisholm favoured for the Outer Hebrides a State Medical Service, the medical man being controlled from some central authority, who would have a voice in the appointments of medical men and their holding of office, and should also rigidly supervise their conduct. After a few years' service in the islands they ought to be promoted, according to merit, to more desirable posts elsewhere.

Mr. Wilson, Subland Commissioner, said that the people generally would be able to pay 5s. a family towards medical aid, that he had worked such schemes in two parishes, and that the people could not pay much more.

REVIEWS OF BOOKS.

DEFORMITIES. (*a*)

No issue of this year will be more welcome to the general surgeon or orthopædic specialist than the second edition of "Tubby's Deformities and Diseases of the Bones and Joints." It is now 16 years since this work first appeared, and therefore it has been necessary that the new edition should be entirely rewritten and rearranged. It is extraordinary how, in spite of this delay in keeping the book up-to-date, the first edition has for so long retained its place as one of the few standard works on Orthopædics.

Since 1896 our knowledge of deformities has expanded its former boundaries to include all the morbid conditions that lead to the deformities of bones and joints. On this account Mr. Tubby treats his subject in a modern way as the surgery of the entire locomotor apparatus.

The result of his work is in these two volumes, which contain a most adequate account of the modern surgical treatment of all deformities, with full discussions of the opinions of the leading bone surgeons. The practical value of the book is increased by numerous clinical records of unusual cases and by a full reference list of authors and papers.

After reading the book one must be glad that such a careful and complete reference is available. Its title is not belied by its contents. After the average book of the sort that merely serves to air the few and well-worn originalities of its author, this one stands out unmistakably the work of a master.

Messrs. Macmillan are to be congratulated on the formation of the book. The illustrations are of great help, and we have never seen better plates of X-ray pictures. The book should certainly be added to the library of every surgeon interested in the most interesting and difficult branch of surgery with which it deals.

LITERARY NOTES.

The distinguished author of "Methods of Air Analysis," Dr. J. S. Haldane, LL.D., F.R.S. (London. 1912. Charles Griffin and Co., Ltd.), is admirable in the way he deals with a tricky subject. He spares no pains to detail at length sources of error and requirements for accuracy. His subject owes very much indeed to his research and his descriptions of the methods of analysis of atmospheric, mine and expired aid and of blood gases, are worthy of the research that preceded them.

* * *

The success of Prof. Dieulafoy's "Text-book of Medicine" appears to be phenomenal in the domain of medical literature. Fifteen editions of the original work in French were sold by the middle of June, 1910, when an English edition was first published by Messrs. Bailliere, Tindall and Cox. This, we are informed, has met with even a more pronounced success; so great, indeed, has been the demand, that the publishers have found it necessary to reprint no less than three times within a period of eleven months.

(*a*) "Deformities, including Diseases of the Bones and Joints." A Textbook of Orthopædic Surgery. By A. H. Tubby, M.S.Lond., F.R.C.S. Second Edition. Illustrated by 70 Plates and 1.000 Figures. Pp., Vol. I., 823. Vol. II., 807. Two Volumes. London: Macmillan and Co. 1912. Price 45s.

They now announce a second edition as "ready this day," making 17,000 copies issued in two years. We have just seen the new edition, in which the Editor and translators state that every chapter has been revised and the newest material added. It is published in two handsome volumes, and is illustrated with nine coloured plates in the text.

* * *

Dr. Vaughan Barber has written a brochure on "The Tuberculin Treatment of Consumption" (London: Nisbet and Co. 1912), which is designed to give tuberculin "its rightful place in the English armoury." Having given a brief sketch of the principles on which tuberculin treatment is based, the author degenerates into indiscriminate eulogy of the work done at Dr. Camac Wilkinson's dispensary in Kennington. The merits and the flaws in Dr. Wilkinson's methods are equally lauded. "One of the most significant features of this treatment is that it can be carried out on patients whose environment remains unaltered—the mother is not taken from her nursing child, the breadwinner is not taken from his daily work." The tuberculin treatment gives, as we know, excellent results in suitable cases. It more general use is being hindered by ill-judged and undiscriminating advocacy.

* * *

The number of tracts on medical subjects, written for lay readers, is rapidly increasing, and there is no doubt that the lay public requires sound information on many medical subjects. It is no easy matter for an author to decide what it is proper to say, and what it is better to omit, and the author who succeeds in the task is entitled to our gratitude. We are glad, therefore, to welcome two booklets dealing with the subject of consumption, both of which are well suited for the instruction of the lay reader. In "Consumption: Treatment at Home and Rules for Living" (3rd edition. Bristol: John Wright and Co. 1912. Price 1s. net), Dr. Warren Crowe gives a series of rules of conduct for patients undergoing treatment for consumption at their own homes. The book is intended to be given by practitioners to their patients. The rules are well chosen and clear, and the author has made them more effective in claiming obedience by giving the reasons for each rule. Each appears, therefore, as the termination of a definite argument. "The Problem of Consumption," by "A Birmingham Physician" (London: Headley Brothers. Price 1s.), is of somewhat different scope and intention. A portion of it appeared first in the pages of *One and All*, the magazine of the Adult School Movement. It appears to be intended, not unsuccessfully, to give the general reader a sketch of the extent, nature, and pathology of consumption, and the methods adopted to prevent its spread and to combat infection. The anonymous author conveys much sound information in an interesting manner.

Medical News in Brief.

Peamount Sanatorium—Question of Water Supply.

In the House of Commons last Wednesday Sir John Lonsdale asked the Chief Secretary if he was aware that although thousands of pounds of public money were being spent by the Women's National Health Association upon the Peamount Sanatorium, the water supply of the place had been found to be insufficient in quantity and unfit for dietetic purposes; would he state who was the Medical Inspector of the Local Government Board who inspected the site and reported it to be suitable for a sanatorium, and why the inspector did not satisfy himself that there was a sufficient supply of pure water for a large institution before recommending the site; would he state approximately how much money had been spent in endeavouring to find water at Peamount, and whether he now considered that this sanatorium was fit for the reception of patients, seeing that all drinking water had to be carted a distance of two miles?

Mr. Birrell: The Peamount site was selected by the Women's National Health Association after it had been examined and favourably reported upon by a well-known Dublin firm of architects and sanitary engineers, and subsequently inspected by three eminent Dublin physicians, who endorsed and confirmed their report. The Local Government Board were not asked to send a medical inspector prior to the decision to select the site, but ever since the actual commencement of the works of construction these have been frequently inspected by two officers of the Local Government Board, and no payments from public funds have been made except after being duly submitted to the Board and authorised thereby. The water supply, on investigation, is found unsuitable for dietetic purposes, but the sinking of a well which will yield, it is believed, an adequate supply of water for all purposes is now progressing. The sanction of the Local Government Board to the opening of the institution as a whole will be given when a thoroughly satisfactory water supply for a large establishment of the kind has been obtained, and not before, but owing to the urgency, which was the primary consideration, for the establishment of sanatoria, the Board inspectors have felt justified in recommending that during the sinking of the well a limited number of patients should be admitted, for whom a supply of drinking water of the most excellent quality can be provided from a spring outside the property, the necessary arrangements having been made for this purpose. I am informed that the expenditure incurred in connection with the water supply at present is well under £200.

Sir J. Lonsdale: At what distance is the spring from the sanatorium?

Mr. Birrell: About two miles.

Sir J. Lonsdale: Why did the Local Government Board not get their own Medical Officers to report on the water supply before authorising the grant?

Mr. Birrell: The site had already been properly examined to the satisfaction of the Local Government Board by experts in Dublin.

The Imperial Medical Reform Union.

At a recent meeting of the Imperial Medical Reform Union the following resolution was unanimously adopted after considerable discussion:—"That the Council of the Imperial Medical Reform Union acknowlege, with thanks, the courtesy of the National Insurance Commissioners in supplying them with advance copies of the Provisional Regulations for the administration of the medical benefits under the National Insurance Act, but notice with regret that in Sec. 28 the Insurance Commissioners should have relegated the medical profession to a subsidiary position as regards remuneration, especially as it is only with their aid that the Act can be carried out and made a success."

Among other avowed objects the Union advocates a one-portal system, hospital reform, contract practice on basis of payment for work done, the suppression of quackery, and the appointment of a Minister of Public Health in the Cabinet.

The British Red Cross Society.

The first surgical "unit" raised by the British Red Cross Society for service in the war left Victoria on Sunday last for Montenegro. The "unit" consists of three dressers and twelve orderlies. Surgeon-General Bourke, as director, was in charge and the other surgeons were Dr. Anthony Bradford, late resident medical officer at St. Thomas's Hospital Home, Dr. F. Goldsmith, of Adelaide, Australia, and Surgeon-Captain Martin-Leake, V.C. The "unit" has been selected, equipped, and despatched by the Medical Relief Sub-Committee of the society in four days. Their destination is Cettinje, where they will arrive on Thursday.

Three further "units"—the cost of which is being paid by Sir Ernest Cassel—will be sent to Turkey on Friday next. Sir Frederick Treves also stated last night that, notwithstanding the poor response to the public appeal on behalf of the Balkan Relief Fund, the society hoped to be able to comply with the urgent requests from Greece for surgical aid.

The Lady Mayoress has arranged for a subscription ball to be held at the Mansion House on Thursday, November 7th, in aid of the British Red Cross Balkan Fund.

The British Red Crescent Society is organising a field hospital for Turkey consisting of surgeons, assistants, male and female nurses, with full equipment, and hopes to despatch it before the end of the week.

X-Rays for Consumptives.

AT the last meeting of the Executive Committee of the Borough of Poplar Dispensary for the Prevention of Consumption, a resolution was passed to instal a complete up-to-date X-ray apparatus for the examination of the chests of consumptive patients.

Medical Fees for Tuberculosis Treatment.

THE Surrey County Insurance Committee have obtained the approval of the National Health Insurance Commissioners to a scale of payments to doctors for work in connection with the treatment of tuberculous patients. The scheme provides for a payment of 5s. for each medical report, Form 2, 2s. 6d. for each visit to patient, and 2s. for each attendance at the surgery, these two payments to include ordinary medicines. It is also recommended that tuberculin be paid for as an extra in each case where it is certified as necessary; that 2s. 6d. be paid for each injection of tuberculin in addition to the ordinary attendance fee; that 5s. be paid for each night visit certified to be necessary between 8 p.m. and 8 a.m.; and 5s. for each quarterly or special medical report required by the Local Government Board.

The York Medical Society.

THE inaugural address of the ensuing session of the York Medical Society was delivered on the 12th inst., in the new theatre at the Yorkshire Philosophical Society's Museum, by Dr. S. Monckton Copeman, F.R.S., who took for his subject the connection between house flies and disease. Dr. Godfrey, president of the York Medical Society, was in the chair, and there was a large attendance, and amongst those present were Dr. Goode, Dr. Evelyn, Dr. E. M. Smith (Medical Officer for York), Dr. Micklethwait, Dr. Mills (Easingwold), Dr. Draper, Dr. F. Turner, Dr. Sanderson Long, and many other members of the Association and their friends.

The annual dinner was held subsequently at the Station Hotel, York, when a large and representative gathering assembled in honour of the orator.

The Royal College of Surgeons of England.

THE new calendar of the Royal College of Surgeons has been issued by the council for the year 1912-13. The fellows now number 1,562, an increase of over forty compared with last year, and include 1,526 who obtained the qualification by examination. The members' list contains 17,062 names, an increase of upwards of 100, while the list of licentiates in dental surgery has also considerably augmented. One lady, Miss Davies Colley, obtained the fellowship by examination during the year, and was the first of her sex to attain the honour. There are now five women on the roll of members, and three hold the diploma in Public Health. No lady student has, as yet, obtained the college diploma in dental surgery. Dr. Peter Redfern, of Belfast, is the oldest fellow, and Surgeon-Major H. B. Hinton, of Glenelg, South Australia, the oldest member.

Dublin Guardians and the Medical Profession.

THE following resolution was passed by 16 votes to 7 at the last meeting of the local Dublin Guardians:—

"That in consequence of the action of the Dublin Medical Committee in refusing medical attendance to members of friendly societies, or other such bodies, and excessive demands made by that Committee, and the undue hardships which will operate on the thrifty workers of the city, it is hereby directed that a notice be inserted in the newspapers, and hung up in the various dispensaries, intimating the hours of attendance of the doctors, morning and evening, also the name and address of each guardian and warden from whom tickets may be obtained, and the conditions of same.

"That the Master of the Union be directed not to permit any bodies from this Union to be sent to the Colleges or Schools of Anatomy, but that in future he sees that all unclaimed bodies are buried.

"That all doctors in the employment of the Guardians or medical officers who are in receipt of a superannuation be communicated with to ascertain if they are assisting the Dublin Medical Committee in their cruel medical boycott, and that the Clerk be directed to have legal opinion as to whether such scheme of superannuations may be cancelled, seeing that the action of the Dublin Medical Committee will necessitate a large number of patients being rejected by the various hospitals, being sent to the workhouse, and the consequent increase in the rates of the city.

"That we request the Irish Members of Parliament to at once have defined the Medical Act of 1858, and, if necessary, its amendment. Copies of this resolution to be sent to each of the medical officers under this Union, and to the Members of Parliament representing the county and city."

The After Care of Recovered Patients Discharged from Insane Asylums.

LADY BATTERSEA has kindly placed Surrey House, Marble Arch, W., at the disposal of the Ladies' Guild connected with the After-Care Association for poor patients discharged from asylums, on Thursday, October 24th, from 2 to 7 p.m., when a café chantant and model market will be held. The proceeds are in aid of the funds of this decidedly useful Association, which is badly in need of funds. Tickets purchased beforehand, price 2s., may be obtained from the Hon. Secretary, Mrs. Ironside Bruce, 10 Chandos Street, Cavendish Square, London, W., or tickets purchased at the door 2s. 6d. The services of a number of well-known artistes have been secured, and the market will be of an attractive character.

Royal College of Surgeons of Edinburgh—Fellowships.

AT a meeting of the Council of the College last week the following gentlemen, having passed the requisite examinations, were admitted fellows:—George W. Bury, M.B., Ch.B.Vict.; Robert G. M. Clements, M.B., Ch.B., M.D.; James G. Cormack, L.R.C.S.E. (Triple Qual.); Arthur Fells, M.B., C.M.Edin.; Howell W. Gabe, M.R.C.S.Eng., L.R.C.P.Lond.; Norman J. Gerrard, M.B., B.S.; Arthur C. Hendrick, M.B.Univ.; Corrie Hudson, D.S.O., M.R.C.S.Eng., L.R.C.P.Lond.; John W. Illius, M.R.C.S.Eng., L.R.C.P.Lond.; Fritz Kahlenburg, M.R.C.S.Eng., L.R.C.P.Lond.; Vaughan Lloyd-Evans, M.B., Ch.B. Edin.; Ronald B. Macfie, M.B., Ch.B.Edin.; Alexander McMurray, L.R.C.S.E. (Triple Qual.); Leonard Myer, M.R.C.S.Eng., L.R.C.P.Lond.; Charles T. H. Newton, M.B., Ch.B., M.D.Edin.; Gerard F. Porter, M.B., Ch.B., M.D.; William Russ, M.B., Ch.B.Edin.; William E. Scott-Moncrieff, M.B., C.M., M.D.Edin.; Arthur A. Straton, M.R.C.S.Eng., L.R.C.P.Lond., M.B., Ch.B.Lond.; Leonard W. O. Taylor, M.B., Ch.B.Edin.; William S. Thacker, M.B., Ch.B., M.D.Dub.

Glasgow University.

The following degrees have been conferred. The graduates included three ladies, who received the degrees of M.B., Ch.B. Three students passed M.B., Ch.B., with honours, four with commendation, and 36 obtained ordinary degrees:—

Bachelor of Medicine and Master of Surgery (M.B., C.M.).—John J. Lowell, L.R.C.P., etc.

Bachelors of Medicine and Bachelors of Surgery (M.B., Ch.B.), with honours.—James H. Robertson (who also gained the Burton Memorial prize for the most distinguished graduate in medicine of the year), Thomas Martin, James H. Dible. With commendation.—William B. Drummond, William F. Wood, Samuel Blumenfeld, Charles Brash, Adam Brown, William Brown, John S. Buchanan, James

W. Burton, John H. J. V. Coates, Jane M. Davidson, James H. Dible, John Dickie, William B. Drummond, John M. Forsyth, John E. Fyfe, Alexander M. Gibson, Maggie L. Kirkwood, Robert A. Lennie, James R. M'Curdie, Charles A. M'Guire, Guy D. M'Lean, John M. Macpherson, Thomas Martin, Kenneth D. Murchison, Andrew Peden, James F. Quigley (Lambhill), David W. Reid, John R. R. Ritchie, Alfred L. Robertson, Edwin Robertson, James H. Robertson, James I. Robertson, Frank Shearar, John F. M'G. Sloan, Alexander R. B. Soga, Graham Stevenson, Ronald Stewart, William P. A. Stewart, William Taylor, John C. T. Teggart, Janet M. Walker, George M. Whish, Frederick J. Whitelaw, Thomas Whitelaw, William F. Wood.

The following passed with distinction in the subjects indicated:—

In (a) Surgery and Clinical Surgery, (b) Practice of Medicine and Clinical Medicine.—James I. Robertson.

In (a) Surgery and Clinical Surgery, (b) Midwifery.—James H. Dible.

In (a) Practice of Medicine and Clinical Medicine, (b) Midwifery.—Thomas Martin.

In Surgery and Clinical Surgery.—Jane M. Davidson and Alexander R. B. Soga.

In Midwifery.—William B. Drummond, John M. Macpherson, David W. Reid, James H. Robertson, and William Taylor.

Royal College of Physicians of Ireland.

At the annual stated meeting of the President and Fellows of the Royal College of Physicians of Ireland, held on Friday, 18th inst., the following officers were elected for the coming year:—

President.—Dr. C. E. FitzGerald. Vice-President.—Dr. James Craig.

Censors.—Dr. James Craig, Dr. T. G. Moorhead, Dr. A. Nixon Montgomery, and Dr. T. Henry Wilson.

Examiners for the Licence to Practise Midwifery.—Dr. G. FitzGibbon and Dr. Holmes.

Additional Examiners to take the place of an Absent Censor or Examiner:—Medicine.—Dr. Parsons. Medical Jurisprudence and Hygiene.—Dr. H. T. Bewley. Midwifery. Dr. Hastings Tweedy.

Supplemental Examiners under the Conjoint Scheme:—Biology.—Dr. E. MacDowel Cosgrave. Chemistry. Dr. Lapper and Dr. N. Falkiner. Physics.—Dr. E. J. Watson and Dr. W. G. Harvey. Pharmacy, Materia Medica, and Therapeutics.—Dr. Travers Smith and Dr. D. J. O'Connor. Physiology.—Dr. H. C. Earl. Pathology.—Dr F. C. Purser. Medicine.—Dr. J. F. O'Carroll and Dr. H. C. Drury. Hygiene and Forensic Medicine.—Dr. W. A. Winter.

Examiners for the Conjoint Preliminary Examinations:—Languages.—Mr. E. H. Alton, F.T.C.D. Mathematics.—Mr. R. A. P. Rogers, F.T.C.D. Irish.—Mr. Edward de Valera, B.A., R.U.I.

Examiners for the Conjoint Diploma in Public Health:—Chemistry.—Dr. E. Lapper. Hygiene.—Dr. H. T. Bewley. Bacteriology.—Dr. H. C. Earl. Meteorology.—Dr. W. G. Harvey.

Examiners for the Membership of the College:—Practice of Medicine.—Dr. Martin Dempsey and Dr. T. G. Moorhead. Clinical Medicine.—Dr. J. Craig and Dr. George Peacocke. Pathology.—Dr. H. C. Earl and Dr. O'Sullivan. Obstetrics and Gynæcology.—Sir William J. Smyly and Dr. A. J. Horne. Representatives of the College on the Committee of Management.—Dr. Walter G. Smith, Sir John W. Moore, and Dr. T. P. C. Kirkpatrick. Representative of the College on the General Medical Council.—Sir John W. Moore. Treasurer.—Dr. H. T. Bewley. Registrar.—Dr. T. Percy C. Kirkpatrick. Librarian.—Mr. R. G. J. Phelps. Law Agents.—Messrs. S. Gordon and Sons. Agent to the Trust Estate.—Messrs. Townshends. Architect.—Mr. A. E. Murray, C.E.

Dr. Charles E. FitzGerald, the new President, practises as an ophthalmologist. He has been a Fellow of the College since 1886. He is Honorary Surgeon Oculist in Ordinary to the King in Ireland, Professor of Ophthalmic Surgery in the Royal College of Surgeons, and Consulting Ophthalmic Surgeon to the Richmond Hospital.

The annual dinner was held last Saturday, 19th inst., being the morrow of St. Luke's Day, in the College Hall, the President in the chair. There was a large company of Fellows and guests. Among the speakers were:—The President, Dr. O'Carroll, the President of the Royal College of Surgeons (Dr. Purefoy), the Right Hon. the Attorney-General (Mr. O'Brien), the very Rev. the Dean of St. Patrick's (Dr. Ovendue), and the Registrar (Dr. Kirkpatrick).

The following is the prize list:—Winter Session, 1911-12:—Systematic Anatomy.—F. R. H. Mollan, first prize (£2) and medal; M. Moran and L. M. Rowlette (equal), second prize (£1) and certificate. Practical Anatomy.—First year—B. Hirson, first prize (£2) and medal; Miss E. Budd, second prize (£1) and certificate; second year—D. Kelly, first prize (£2) and Medal; J. O'Brien and D. V. O'Connor (equal), second prize (£1) and certificate. Practice of Medicine.—William I. Adams, first prize (£2) and medal; John D. Cherry, second prize (£1) and certificate. Surgery.—G. N. Smyth, first prize (£2) and medal; A. F. I. Patterson, second prize (£1) and certificate. Midwifery.—Geoffrey N. Smyth, first prize (£2) and medal; John D. Cherry, second prize (£1) and certificate. Pathology.—R. P. Weldon, first prize (£2) and medal; W. H. Carden, second prize (£1) and certificate. Physiology.—Edwin N. H. Gray, first prize (£2) and medal; A. P. Adams, second prize (£1) and certificate. Chemistry.—M. Mosbery, first prize (£2) and medal; Miss M. M'Mullen, second prize (£1) and certificate. Physics.—M. Mosbery, first prize (£2) and medal; Miss M. M'Mullen, second prize (£1) and certificate. Dental Anatomy.—J. J. Hutton, first prize.

Summer Session, 1912.—Carmichael Scholarship.—£15, G. M. C. Powell. Mayne Scholarship.—£8, M. J. Hillery. Gold Medal in Operative Surgery.—W. I. Adams. Silver Medal in Operative Surgery.—M. J. Hillery. Stoney Memorial Gold Medal in Anatomy.—G. M. C. Powell. Practical Histology.—N. E. Stephens, first prize (£2) and Medal; J. W. E. Graham, second prize (£1) and certificate. Practical Chemistry.—D. H. Ferris, first prize (£2) and medal; D. J. Steele, second prize (£1) and certificate. Public Health and Forensic Medicine.—G. M. C. Powell, first prize (£2) and medal; L. S. O'Grady, second prize (£1) and certificate. Materia Medica.—W. H. Carden, first prize (£2) and medal; G. M. C. Powell, second prize (£1) and certificate. Biology.—Miss E. Budd, first prize (£2) and medal; Miss M. M'Mullen and H. M. Alexander (equal), second prize (£1) and certificate. Surface and Topographical Anatomy.—J. C. Ferguson, first prize (£2) and medal; D. V. O'Connor, second prize (£1) and certificate.

University of Cambridge.

At a Congregation held on October 18th, the following degrees were conferred:—

M.D.—George Graham, Trin.; Alfred Bakewell Howitt, Clare.

M.C.—Frederic John Cleminson, Caius.

M.B., B.C.—Harold Bowring, King's; Alan Cecil Gemmell, Trin.

M.B.—Charles Barrow Wainwright, Caius; Llewellyn McIntyre Weeks, Caius.

B.C.—Charles Edward Redman, Pemb.; John Elliston, Down.

Conjoint Examinations in Ireland.

The following candidates have passed the examinations of the Royal College of Physicians and the Royal College of Surgeons, October, 1912:—

Preliminary Examination.—G. G. Allardyce, T. N. D'Arcy, W. Evans, L. Finnegan, W. Forde, G. E. Hare, P. J. Kelly, W. J. Marshall, H. L. Mooney, R. W. Morrison, T. P. MacDonnell, M. O'Connor, M. J. O'Reilly, E. S. W. Peatt, J. A. Power, G. C. F. Roe, J. C. Rutherford.

First Professional Examination.—J. H. Barrett, S. H. Berwitz, J. J. Campbell, B. J. Daunt, R. D'Alton, Miss E. M. Lloyd Dodd, C. K. T. Hewson, E. T. McElligot, T. Moore, P. O'Connell, J. Sharpe.

NOTICES TO CORRESPONDENTS, &c.

☛ **Correspondents** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

F.R.C.S. (Hants).—The so-called catalytic action of metals in the colloid state is directly associated with the presence of the ultra-microscopic particles composing these substances, which appear to influence the biochemical processes of the living cells.

PNEUMONIA AND PUBLIC HEALTH.

According to the last annual report of the Medical Officer of Health for the metropolitan borough of Islington, Dr. A. E. Harris, pneumonia is becoming of greater interest to public health authorities, though, up to the present, no definite attempts to schedule it among the notifiable diseases has been made in this country. Considering the importance of pneumonia and the fact that it is truly an infectious disease, it is interesting to note that a special weekly record of the deaths therefrom has been carefully kept since 1896 by Dr. Harris which has been specially charted for his report. It is most satisfactory to note that the death-rate of 14.9 per 1,000, though not the lowest on record, was nevertheless, with three exceptions, the lowest in a hundred years.

Dr. L. Y. (London, S.E.).—Conditions of localised œdema due to some lympathic obstruction are not unknown as the more or less immediate result of traumatism, even though this be only slight.

Meetings of the Societies, Lecturs, &c.

Wednesday, October 23rd.

Royal Society of Medicine (Section of Ophthalmology) (1 Wimpole Street, W.).—8.30 p.m.: Inaugural Business Meeting. Election of Officers.

Hunterian Society, London Institution (Finsbury Circus, E.C.).—9 p.m.: The President (Mr. A. H. Tubby): Address. 9.15 p.m.: Discussion on Intravenous Anæsthesia.

Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.).—5.30 p.m.: Mr. J. F. Colyer: John Hunter's Specimens illustrating the Formation and Growth of Teeth. (Museum Demonstration.)

Friday, October 25th.

Royal Society of Medicine (Section for the Study of Disease in Children) (1 Wimpole Street, W.).—4 30 p.m.: Cases by Dr. Porter Parkinson, Mr. Philip Turner, Mr. Sydney Stephenson, Dr. Reginald Miller, Mr. Maynard Heath, Mr. Duncan Fitzwilliams, Dr. F. J. Poynton, Mr. T. H. Kellock, Dr. Edmund Cautley. Specimen by Dr. Alexander Morison. Papers: Dr. E. C. Williams: Notes on a Case of Precocious Development in a Boy, aged Six Years, with Photographs. Dr. Leonard Guthrie: Epidemic Catarrhal Jaundice.

Royal Society of Medicine (Section of Balneology and Climatology) (1 Wimpole Street, W.).—5.30 p.m.: Presidential Address: Dr. Percy Lewis: Sepsis and Spa Treatment. (The Annual Dinner of the Section will be held at the Cafe Royal, Regent Street, at 7.45 p.m.)

Royal Society of Medicine (Section of Epidemiology) (1 Wimpole Stret, W.).—8.30 p.m.: Presidential Address: Dr. W. Hamer: The Influence of Migration upon the Phthisis Death Rate.

Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.).—5 p.m.: Prof. Keith: New Additions to the Collection of the College Museum.

Monday, October 28th.

Medical Society of London (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Communications relative to Hedonal Anæsthesia. (1) "A Further Communication as to its Uses in General Surgery," Mr. C. M. Page, M.S. (2) "Its Uses in Surgery, especially of the Nervous System," A. Z. Mennell. (3) "Its Uses in Children," Mr. L. E. Barrington Ward. (4) "Objection to the Use of Hedonal," Mr. J. F. Robson, M.S.

Appointments.

Boyd, Sidney, M.S.Lond., F.R.C.S.Eng., Surgeon to In-patients at the Belgrave Hospital for Children.

Crookshank, F. G., M.D., M.R.C.P., Assistant Physician, the Belgrave Hospital for Children.

Donald, Archibald, M.D.Edin., M.R.C.S., the Chair of Obstetrics and Gynæcology in the Manchester University.

Henderson, William T., M.B., B.Ch.R.U.I., Second Assistant Medical Officer at Hawkhead Asylum, Paisley.

Hicks, J. A. Braxton, M.D., B.S.Lond., D.P.H.Cantab., Pathologist and Registrar at Queen Charlotte's Lying-in Hospital.

Howell, B. Whitchurch, M.R.C.S., L.R.C.P.Lond., has been appointed House Physician to the Royal Free Hospital.

MacCormac, Henry, M.B.Edin., M.R.C.P.Lond., Assistant Physician to the Department for Diseases of the Skin at the Middlesex Hospital.

Vacancies.

The Prudential Assurance Company.—Permanent Medical Officer at its principal office, Holborn Bars, London, Salary £500 per annum. Applications to General Manager.

Wakefield General Hospital.—Second House Surgeon. Salary £100 per annum, with board, lodgings, and washing. Applications to the Hon. Secretary, Clayton Hospital, Wakefield.

Bristol General Hospital.—Senior House Surgeon. Salary £120 per annum, with board, residence, etc. Applications to the Secretary.

Nottingham General Dispensary.—Assistant Resident Surgeon. Salary £170 per annum, with apartments, attendance, light, and fuel. Applications to C. Cheeseman, Secretary, 12, Low Pavement, Nottingham.

Stamford Hill and Stoke Newington Dispensary.—Assistant Resident Medical Officer. Salary £100 per annum, with board and apartments. Applications to the Honorary Secretary and Treasurer, Mr. G. H. Alexander, 83 Lordship Road, N.

Caterham Asylum.—Third Assistant Medical Officer. Salary £150 per annum, with board, lodging and washing. Applications to the Medical Superintendent, Caterham Asylum, Caterham, Surrey.

Wolverhampton Union.—Assistant Resident Medical Officer. Salary £150 per annum, together with furnished apartments, rations, etc. Applications to Frank Harrison, Clerk of the Guardians, Poor Law Offices, Wolverhampton.

Births.

Fell.—On Oct. 10th, at Flan How, Ulverston, the wife of Major M. H. G. Fell, R.A.M.C., of a daughter.

Little.—On Oct. 20th, at 61 Wimpole Street, W., the wife of Dr. E. Graham Little, of a daughter.

Moyles.—On Oct. 14th, to Dr. and Mrs. J. G. Moyles, 2 Bedford Road, Walton, Liverpool, a daughter.

Stack.—On Oct. 14th, at Arvalee, Clifton, the wife of Dr. Stack, of a son.

Symes-Thompson.—On Oct. 21st, at 14 Gloucester Place, W., the wife of Henry E. Symes-Thompson, M.D., of a son.

Marriages.

Gormley—Skerrett.—On Oct. 17th, at South Kensington, Lieutenant-Colonel J. A. Gormley, R.A.M.C., retired, to Rose Edith, daughter of the Rev. F. F. Kelly and widow of the late Major Skerrett.

Mallins—Penrith.—On Oct. 17th, at St. Luke's, Kensington, Clement Mallins, Lt.-Col., I.M.S. (retired), to Bessie, second daughter of the late Rev. T. H. Penrith.

Deaths

Beard.—On Oct. 13th, at St. Matthew's Vicarage, Oakley Square, N.W., Emily, wife of Charles Izard Beard, M.B., L.R.C.P., and daughter of the late William Izard, of Brighton, in her 85th year. R.I.P.

Burt.—On Oct. 12th, at Wolverton, from pneumonia, after a few days' illness, William Charles Burt, M.R.C.S., L.R.C.P., aged 53.

Charlton.—On Oct. 20th, at 1 Herbert Mansions, 35 Sloane Street, S.W., Fleet-Surgeon G. R. Deighton Charlton, Royal Navy, aged 62. R.I.P.

Duncan.—On Oct. 18th, at a nursing home, Andrew Duncan, M.D., B.S.Lond., F.R.C.P., F.R.C.S., Lieutenant-Colonel, late Indian Medical Service, eldest son of the late James Duncan, M.B.Lond., aged 62.

O'Connor.—On Oct. 20th, suddenly, at The Limes, March, Cambridgeshire, Charles Patrick O'Connor, M.D., M.R.C.S.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, OCTOBER 30, 1912. No. 18.

NOTES AND COMMENTS.

The B.M.A. and Sir James Barr.

AT the present moment the whole Insurance agitation centres around the British Medical Association. Any declaration coming from that source, therefore, is certain to attract immediate attention. The *Times* of Friday last, the 25th instant, publishes what purports to be an official statement of the policy of that body, which has every air of authority and is stated to come "from the office" of the Association. If that be the case it reveals a curious state of affairs in the inner life of that important body. It will be of interest to learn on whose responsibility in the "office" the authorisation was given to the *Times* for the publication of the following passage. "With reference to the banquet of the Irish medical profession," it runs, "Sir James Barr is attending as a guest. He will express his own opinion, no doubt, as he always does, but he will not be in an official position to make a statement on behalf of the Association, nor will Dr. Esmonde, M.P." Whatever the status of Sir James Barr as President of the British Medical Association, and the weight to be attached to his utterances at an important medical gathering on a medico-social subject of first-rate importance, apparently neither consideration overawed the gentleman in the "office" who took upon himself the responsibility of warning the public against attaching too much importance to what his chief was likely to say. It is much that same as if a clerk in the Treasury were to write to a London newspaper informing its readers that Mr. Lloyd George's views at a forthcoming meeting would not represent those of his department!

What is Loyalty?

SURELY, the office of an Association should be loyal to its President. Or if the office be inspired by any strong feeling that in making a protest it is expressing the views of members generally, or of a representative governing body in particular, then its proper course of action is clear. Otherwise it is surely a confession of internal weakness if at the present crisis an administrative office girds openly at its President The example is hardly inspiring at a moment when the need for absolute loyalty and subordination of personal feeling and opinion is above all things absolutely incumbent if the situation is to be saved. Sir James Barr, as everyone knows, is by nature impetuous, and at times oversteps the border line that would be observed by men of more restraint. On a former occasion when he lapsed into a personal attack on the Chancellor of the Exchequer, we felt it a duty to protest against his departure from the established ethics of public controversy. On an occasion like that of the Irish Medical Graduates' gathering, however, it would be difficult to believe that he would deal with an extremely difficult and delicate position in any way likely to detract from the high position in which he has been placed by the medical profession. Meanwhile, the incident of the "office" warning suggests the desirability of the Association asserting itself more effectively in the management of its own affairs.

An Alderman on "Very High" Medical Fees.

IT has long since been evident that the public, including the Chancellor of the Exchequer, have learned to appreciate medical services at an extraordinarily low value. Of all men a solicitor should know that the fee is given for advice that is the outcome of a vast outlay of time and money to acquire. Surely the member of a profession that charges (when it can) six and eightpence for writing or for reading a letter, and half that fee for answering a telephone call, would not be expected to cavil at payment for a night call, with all its attendant fatigues, or for a journey covering several or many miles distance. Yet the medical man is expected to perform responsible and arduous duties in return for a paltry fee. Could anything require more skill and technical knowledge than the proper handling of cases of consumption? In Preston the other day the Sanatorium Sub-Committee submitted a scale of charges to the Town Insurance Committee. For a report 5s. was allowed, and half-a-crown each for consultation at surgery; visit to patient; injection of vaccine (extra; drug to be supplied by authority); and consultation with tuberculosis officer (extra); night visits, 5s. Alderman Green objected to these charges on the ground that they were "very high." Probably he fails to realise the value of those services, or the high quality of the skill that is needed to perform them adequately. Local authorities find themselves obliged to turn to the medical profession for help, but they do not care to pay them adequately. It is a curious comment on the unworldliness of medical men that the same public which grudges their pence to a learned profession, nevertheless pours its money profusely into the coffers of the quack medicine man. It is all more or less a matter of education. The man in the street has been taught to pay high for advertised nostrums.

The Brompton Hospital for Consumption.

IN the long history of the fight against tuberculosis, the Brompton Hospital for Consumption occupies a position of front rank. Long before the researches of Koch placed our knowledge of the malady upon a scientific basis, pioneer work of an important kind had been carried on within the classic walls of that institution. The list of lecturers for the Michaelmas term comprises the names of a number of distinguished medical men. Amongst other instruction is that of a special post-graduate course in the diagnosis and treatment of pulmonary tuberculosis and the use of tuberculin. The staff have further issued a general invitation to all practitioners interested in the subject of tuberculosis to attend a gathering at the Hospital at 8.45 p.m. on Monday, November 4th. The new laboratories will be open to inspection upon that occasion, and Dr. Inman will give a demonstration on the varieties of the tubercle bacillus, illustrated by specimens kindly lent for the purpose by Dr. Stanley Griffith, the Scientific Investigator to the Royal Commission on Tuberculosis. It is hoped that those who purpose to attend this highly-interesting demonstration will intimate their intention beforehand to Dr. Cecil Wall, the Dean of the Hospital. Some of our readers may have heard the interesting rumour that the Brompton Hospital may be taken over by the Government and made the centre of a great national organised system of sanatoria and special institutions for fighting tuberculosis.

Pellagra and Insanity in the United Kingdom.

Drs. Louis Sambon and Chalmers have published in the *British Medical Journal* of October 24th a communication upon pellagra in the British Islands that must rank high in medical importance. The old theory of the origin of this protean disease from the eating of diseased maize has for some time been abandoned. Sambon and Chambers have shown it to be due to a protozoan infection conveyed by a small midge, the *simulium*, which haunts the banks of rapidly-running streams. Before these discoveries the habitat of pellagra had been widely extended from its original endemic fields of Italy, Austria, the South of France and Spain. In 1907 it was found to be prevalent in America, and no less than 10,000 cases have been identified. The malady is characterised by recurring eruptions, by a chronic multiform affection extending over many years, and by nervous disturbances frequently ending in insanity. It is a disease, therefore, that may readily be overlooked on account of the very multiplicity and intangibility of its symptoms and the difficulty of bringing them within the limits of a correlated set of phenomena. Drs. Sambon and Chalmers have shown that many cases of pellagra exist in the United Kingdom, and that the *simulium* exists in many of its rapidly-flowing streams. They have therefore led the way for another advance into the territory of preventable disease. If their labours have the happy result of lessening the incidence of that most terrible of all endemic maladies, insanity, they will indeed have conferred a boon upon suffering humanity. Even to point out a probable preventable cause for mental disease in our midst is to furnish a great stimulus to medical research in a field where the outlook has hitherto been one of great obscurity.

LEADING ARTICLES.

THE INSURANCE ACT.

The long-expected reply from Mr. Lloyd George has at length been given, and it remains for the medical profession to accept or reject his offer. Coming as it does at the end of October, that is to say, two months before the medical benefits under the Insurance Act come into operation, the terms offered by the Chancellor of the Exchequer must be regarded as practically final. It therefore behoves medical men to consider the facts of the situation most carefully from all possible points of view before coming to a decision fraught with issues of vital consequence to their future welfare. That a considerable concession has been made by the Government is clear, inasmuch as it involves an additional expenditure of £1,650,000 per annum. There is a *suggestio falsi* about the matter, however, which seems to have misled the majority of the newspapers and of the public, namely, that the whole of this grant will go into the pockets of the medical profession. As a matter of fact, much of it is destined for other channels. The original offer was 6s. a year for each insured person, inclusive of drugs. This proposal was rejected by the medical profession, which demanded a minimum fee of 8s. 6d., exclusive of drugs and extras, an income limit, adequate medical representation on Insurance Committees, and free choice of doctors for insured persons. The Chancellor of the Exchequer has now offered sums which in their total amount reach a capitation grant of 8s. 6d. Of that amount it is proposed a minimum of 6s. 6d. be definitely assigned for medical remuneration and 1s. 6d. for drugs. A further sum of 6d. will be available for drugs when required, and will, under some circumstances, be alternatively available for medical fees. Another 6d. will be applicable from the sanatorium benefit fund for the payment of general practitioners attending tuberculosis cases. The outcome of the proposals, if we interpret Mr. Lloyd George's proposals correctly, is that medical men are offered a capitation fee of 7s., which, in some instances, will be increased to 7s. 6d., that amount to be exclusive of drugs. The first point to be settled is whether 7s. is to be accepted in view of the demand for 8s. 6d. The next point is the question of extras, including mileage, for which no allowance has been made. Is the Insurance doctor to do night work and go long distances without extra pay? Next consider the matter of the abuse of medical contract practice by the well-to-do member who can afford to pay fees for private attendance. No attempt has been made to remove that grievance, which rankles deeply in the minds of the medical profession. Why should not a limit be fixed for incomes beyond which the possessors should not be entitled to share in benefits deliberately devised by the State to help the poorer classes of society? What medical man who has been called to attend club patients living in luxuriously furnished private houses is ever likely to accept graciously, or with approval, any national scheme of insurance which does not provide against the repetition of that grave abuse? If Mr. Lloyd George has been compelled to submit to the views of the friendly societies upon this point, perhaps he will give medical men some inkling as to the motive of those organisations in insisting upon the absence of a wage limit. It can hardly be supposed that the friendly societies wish to retain an empty and barren right which no one will exercise at the cost of the insurance doctor when he is once tethered securely to his post. Two further details that are likely to be criticised by medical men are, first, the proposal to control their attendance by a lay committee, and secondly, the demand for modern refinements of diagnosis, which are notoriously of a prohibitively costly nature. However, these and other points will be discussed forthwith completely by medical men in all parts of the Kingdom. There can be little doubt that a firm offer of 7s. 6d. is likely to attract a large number of practitioners. So far as the Medical Press and Circular is concerned, it seems clear that it would be unwise to attempt to assume any definite position at the present stage of negotiations. The report of the State Sickness Insurance Committee of the British Medical Association will be issued shortly, and will be considered by the Representative Council on November 19th and 20th. Whatever the decision of that body may be, it is to be hoped that the medical profession as a whole will uphold it to the last letter. It would be a serious blow to our newly-found faculty of collective organisation were the Representative Council to arrive at one decision and any considerable number of dissentients to act upon another. Now, if ever, is the time when the individual judgment should be loyally subordinated to that of the majority. It is naturally a temptation to men of strong character to differ from the voice of representative authority, but in the present case to dissent from the deliberate verdict of the representatives is to split a revolting force in the face of the enemy. Lastly, the proposal to impose the new conditions to a term of three years probation may influence the decision of many medical men. One important feature of Mr. Lloyd George's announcement was the intimation that failing a satisfactory agreement, steps would be taken to form a State Medical Service. How that is to be effected without the co-operation of the medical profession is somewhat of a mystery. In any case it would mean an indefinite addition to the outlay which has been made so grudgingly by the State for medical benefits. Within the next few weeks much history is likely to be written in the annals of the profession.

THE POSITION OF DENTISTRY.—III.

The correspondence on the above subject, which was started in our pages in September last, has continued until to-day without losing in importance or interest. We are satisfied that it cannot at the least have failed to stimulate thought and activity in the direction of medical law reform; and when the preoccupations of the Insurance Act shall have ceased, with settlement of the burning questions there involved; when the Select Committee on Patent Medicines shall have issued its report and recommendations; when the profession seems once more free from further political activity, we shall do our best again to force the question to the front and keep it there. It our last article we discussed the General Medical Council and examined its defects as a representative body. It must be always borne in mind that the Council has very limited statutory powers, and has carried out its defined functions with respectable exactitude in the way of controlling education and registration. The Council has, however, not exercised with sufficient vigour the power that it has possessed of urging upon Government the need for amendment of medical laws, the weaknesses of which have been thrust before it at every Session. If, for instance, the Medical Council had taken every opportunity of directing the attention of the Privy Council to the defects of the law, reform would by this time have been brought much further within the sphere of practical politics. The report issued by the Privy Council in 1910 on unqualified practice was the direct outcome of representations from the Medical Council. This suggests what more might have been done long ago by similar activity. The Council on discovering its statutory weaknesses might have asked for, might, indeed, with its authority, have virtually demanded, the necessary enlargement of its powers. It seems almost incredible that although elaborate laws have been devised to guard the public against gross forms of medical fraud, the Legislature has invariably omitted to make provision for the enforcement of these laws—has never appointed a public prosecutor or delegated the duty into the hands of any existing authority. The Medical Council can take cognizance only of offences committed by registered practitioners, and then only upon complaint from outside bodies; it has no power to initiate or carry on the prosecution of any unqualified pretender. The medical corporations—the Universities and the various colleges of physicians and surgeons—are merely educational and examining bodies, and have not the power, if they had the desire, to assume any other function. The vindication of medical law was left virtually to private enterprise, and years of delay in exposing its flaws were the result. That the construction of laws, for the effectual protection of the public and professions is a task not beyond the power of statesmen is evident. An attempt of an unqualified man to practise as a solicitor invariably meets with speedy condign punishment; and such a flagrant abuse as unchecked practice and assumption of titles by unqualified adventurers in the legal profession is virtually impossible. The working of the Veterinary Act affords, again, an exemplification very much to the point. This Act became law in August, 1881. It is modelled on the lines of the Dentists Act; but the functions exercised by the Medical Council under the latter are delegated to the Royal College of Veterinary Surgeons, with the added duty of enforcing the Act. The preamble of the Act states that its main purpose is to make provision "to enable persons requiring the aid of a veterinary surgeon for the cure or prevention of diseases in, or injuries to, horses and other animals to distinguish between qualified and unqualified practitioners." The penal clauses of the Act directed to this purpose differ little in their wording from, and are precisely the same in sense as those of, the Dentists Act. The College of Veterinary Surgeons encountered no difficulty in vindicating the law. It had long been the custom for unqualified farriers to display a sign inscribed "Veterinary Forge." A number of these men were summoned under the Act on the ground that the use of the word "veterinary" was calculated to lead to their being mistaken for qualified veterinary surgeons; and although it was pleaded that they had acted without intent to deceive, they were in every instance heavily fined. No attempt being made to reverse in the High Court these magisterial decisions, the Veterinary Act was thus fully vindicated. There is nothing to hinder unqualified men from practising veterniary surgery, so long as they do not pretend to be legally qualified; the public are protected so far as possible from mistaking unqualified pretenders for properly educated practitioners; and poor dumb brutes are also thus far safeguarded against the torments which unscientific "veterinary surgery" so often inflicts upon its victims. The Medical Acts devised to provide for men the same protection as the Veterinary Act affords to brutes, date from 1858; and the Dentists Act from 1878. Under none of these Acts through all these years has it been possible to check the evils they were devised to prevent; they remain dead letters. The case for drastic reform of medical law is overwhelming; to work for this reform is a pressing duty which the profession owes to itself and to humanity.

CURRENT TOPICS.

The King and Tropical Medicine.

The friends and supporters of the London School of Tropical Medicine will note with pleasure that his Majesty the King has been graciously pleased to mark his interest in the school and his care for the welfare of his tropical Dominions by sending a contribution of £100 to the fund recently opened by the Lord Mayor in response to an appeal by Mr. Austen Chamberlain, who has received the following letter signed by Sir William Carrington:—"The King commands me to enclose a cheque for £100 towards the London School of Tropical Medicine, which his Majesty trusts will continue to extend its excellent work. The King notes with interest that the school owes its inception to your father." In forwarding this letter for publication, Mr. Austen Chamberlain writes:—"His Majesty's interest and approval encourage us to make a renewed effort to secure the £100,000 for which we originally asked. We have already secured nearly half that sum. But more is urgently needed to place the school on a sound financial basis, and to enable it to prosecute effectively the great work of training and research by which the deadliest terrors of tropical life are being steadily eliminated, the death-roll of whites and natives alike is being diminished, and the development of these fertile lands is rendered possible without the terrible suffering and loss of life which it has previously entailed." Donations may be sent to the Secretary of the London School of Tropical Medicine, Seamen's Hospital, Greenwich, or to Mr. Chamberlain, either of whom will be glad to supply correspondents with any further information they desire.

Notification of Consumption in France.

Some time ago we gave the comparative statistics of pulmonary tuberculosis in Berlin, London and Paris, and showed how badly "La Ville Lumière" came out of the inquiry. There can be no doubt that the prime cause of the spread of phthisis in Paris lies in the bad housing of the poorer classes. Although the families practically never number more than three children, these, with their parents, are lodged, as a rule, in one or two small, unventilated rooms into which enough sunlight never penetrates, whilst the tenements throughout are too often filthy and permeated by foul air drawn in from sewer or cesspool *via* untrapped and unventilated soil pipes. It is evident that much more good would be done by attacking root causes like these than by measures of isolation and attempted cure of victims of disease. This view was very strongly urged at a meeting of the Academy of Medicine last week, when the subject was brought up—in a discussion on the proposed compulsory notification of consumption—Professor Robin, who led the attack on this proposal, was supported almost unanimously by the meeting. He said that such a scheme was impossible in any country where it was disliked by the people, and in France it would provoke a revolt—French doctors would, he alleged, never take up the policeman's work of handing over to the sanitary authorities patients who had confided in them. He then went on to examine the question of expense. This Dr. Robin believed would not be less than forty millions. It would be necessary to support vast numbers who would be taken from employment and pauperised. He urged that the money would be much better spent in ameliorating conditions of life among the poor, in improving their health, especially by better housing, so that the tuberculosis bacilli which everyone swallows by the myriad daily would find no soil for their culture.

"Vis Malefactrix Naturae."

The healing power of "Nature's own sweet and cunning hand" has been sung so often by the poets and bedside clinicians that we have almost come to regard it as perfect. We commend a system of treatment as "natural," and what higher praise can we give a remedy than that it is "Nature's own"? If we look, however, at Nature's work with the modern eye of criticism we find her sometimes a poor enough bungler in therapeusis. She has three or four ways of dealing with all emergencies, and these are not always efficient. Fever, force, swelling and scar-tissue make up much of her armament, and we find her "exerting an unwearied power" with one or other of these in season and out of season. If our body lodges a few pneumococci Nature runs up our temperature in a very ineffective effort to kill the invaders. She pushes a stone along a tube never intended for such traffic, till its unfortunate owner collapses from the pain. Any local trouble is promptly dealt with by a swelling. Often this is comparatively harmless; but why obliterate an unfortunate child's glottis to attract attention to some slight laryngeal irritation? And then her methods of repair; "one touch of Nature makes the whole world" scar-tissue, a substance that contracts when it should stretch, and stretches when it should contract, till our hospitals are "rich with the spoils of Nature." The trouble is that Nature has no second string. She has one way of dealing with a given condition, and if that fails—she keeps on doing it. Her methods are fairly satisfactory as a temporary treatment, but they do not bear the test of time—scar-tissue will fill a gap, but after a few weeks its failings become very obvious. If she would learn to apply a little more discrimination to the use of her remedies, she might even now live down the reproach we are sorry to say she has earned, of being somewhat of a short-sighted empiricist in many of her therapeutic efforts.

The Quality of Milk in Relation with the Food of Cows.

The report recently published by the Edinburgh College of Agriculture gives the results of experiments to show the effect of heavy root feeding on the quantity and composition of milk. The belief was long entertained that the quality, as well as the quantity, of milk given by a cow could be influenced by altering the diet, but the new theory that there is only an indirect, if any, connection between the ration and the amount of fat and other solids in milk is now commonly accepted. The Edinburgh experiments confirm this interpretation, and their teaching may be commended to the notice not only of public officials concerned with the administration of the law as it affects the milk supply, but of scientific investigators in similar fields. If any diet would tend to increase the yield of milk and lower the percentage of fat, a heavy allowance of roots containing about 90 per cent. of water might be expected to have such a result. The special ration in the recorded experiments included 112 lbs. of turnips, compared with 40 lbs. in the ordinary ration, the same quantities of hay and straw being given in both cases, while along with the larger quantity of roots the cows received 4 lbs. each per day of concentrated stuffs, as against 10 lbs. each given to the other lot. The results are conclusive, being based upon trials repeated in three successive winters. The cows that received the turnip ration gave richer milk, though less of it, than those fed with the concentrated ration. This proves that, whereas the quantity of milk is affected directly by the food consumed, the percentage of fat and other solids depends upon the inherent merits of the cow herself. The fact that the concentrated ration resulted in a milk yield with a lower percentage of fat does not mean that watery food is productive of fat, but implies rather rich feeding increases quantity disproportionately to quality.

The "Edinburgh Review" on Secret Remedies.

It is hard to understand how an article of the quality of that on "Secret Remedies," in the current issue should find admission to the *Edinburgh Review*. The writer shows himself lacking in knowledge of fundamental facts without which it is impossible to understand the question, much less to pass judgment upon it. It would be tedious to go through all his errors. He does not seem to be aware of the difference between legitimate pharmaceutical preparations, the constituents of which are fully revealed, and nostrums put forth with the pretence that they contain potent agents unknown to medical men. The writer does not seem to understand that there exists in fact no such thing as a "secret" remedy; that chemical analysis easily discloses the constituents, and has been applied to the great majority of nostrums. He does not seem aware of the notorious fact that although "secret" remedies are sometimes made up of opiates or of alcohol, or cocaine, as in many of the sham tonics extensively advertised, they rarely contain anything more potent than a small dose of cheap purgative. It is amazing to see a writer assuming an air of authority on this question who does not appear to know that chemistry is one of the most advanced of the sciences, and that it needs only a small amount of practical skill in it to separate and determine the quantities of the ingredients in any ordinary inorganic or organic compound, whilst an accomplished analyst finds little difficulty even in tracing and recovering a minute quantity of the most elusive of alkaloids deposited within the tissues of a body dead from poisoning. He does not, apparently, see that if quack medicines contained unknown agents they would be discoverable and separable. The vast majority are worthless trash, and the harm they do arises from reliance being placed upon them in serious diseases. In every department of every hospital there are always to be discovered numbers of patients with simple diseases which have become chronic, and serious maladies which have passed into a mortal phase owing to delay in applying scientific treatment. All these facts are ignored by this presumptuous and ill-informed writer.

PERSONAL.

Mr. V. Zachary Cope, M.D., M.S.Lond., F.R.C.S., has been appointed Surgeon to the Bolingbroke Hospital, Wandsworth.

H.M. the King has been pleased to confer the decoration of Member of the Victorian Order (fourth class) upon Dr. Edgar Hoffmeister, of East Cowes, surgeon to the Royal Family at Osborne.

Dr. F. G. Crookshank, M.D., M.R.C.P., has been appointed Assistant-physician to the Belgrave Hospital for Children.

Captain P. Dwyer, R.A.M.C., has been selected for appointment as Specialist in Otology at the Royal Infirmary, Phœnix Park, Dublin.

Captain P. A. Lloyd-Jones, R.A.M.C., has been selected for appointment as Specialist in Ophthalmology at the Cambridge Hospital, Aldershot.

Mr. Chad Woodward, M.B., Ch.B.Edin., F.R.C.S., has been appointed Surgeon to Out-Patients at the Hampstead General and North-West London Hospital.

Mr. Bryden Glendining, M.B., M.S.Durh., F.R.C.S., has been appointed Gynæcologist to the Hampstead General and North-West London Hospital.

Dr. Frederick Taylor, M.D., F.R.C.P., has been elected Chairman of the Committee of Medical Members of the Senate of the University of London for the ensuing year.

Dr. Henry Gifford Cribb, of the London County Asylum, has been appointed superintendent of the Durham County Asylum at Sedgefield, in succession to Dr. Skene, retired.

The Council of Bedford College for Women, London University, have recently received from Miss May Tweedy a gift of £500 towards the fittings of the Physiological Laboratory.

Mr. Henry C. Bazett, M.B.Oxon., F.R.C.S., of Wadham College, Oxford, and Radcliffe Travelling Fellow, has been elected to a Fellowship in Medical Science at Magdalen College.

The Lord Lieutenant of Ireland has appointed Sir Thomas Myles, M.D., to be a Governor of the House of Industry Hospitals in the room of Sir William Thornley Stoker, deceased.

Mr. Charles Alfred Ballance, M.V.O., M.S., F.R.C.S., of St. Thomas's Hospital, has been appointed by the Home Secretary to be Chief Surgeon of the Metropolitan Police, in place of the late Mr. Clinton Dent.

Dr. T. P. Cowen, Senior Assistant Medical Officer at Prestwich Asylum, has been appointed by the Lancashire Asylums Board to be Medical Superintendent of Rainhill Asylum, in succession to Dr. Wigglesworth, resigned.

Mr. E. C. Temple-Smith, D.O.Oxon., M.B., Ch.B., R.U.I., F.R.C.S.E., has been appointed Honorary Ophthalmic Surgeon to the Liverpool State Hospital and Asylum for the Infirm, Sydney, New South Wales.

The Lady Mayoress of London has kindly promised to take the chair at the annual meeting of the Royal Medical Benevolent Fund on Friday next at the Mansion House. Tea will be provided at 4.30 p.m., followed by the meeting at 5 o'clock.

Sir Almroth Wright, F.R.S., will deliver the opening address of the winter session of the North-East London Post-Graduate College, Prince of Wales's General Hospital, Tottenham, N., this afternoon, Wednesday, at 4.30 p.m., on "Lymph Lavage as a Therapeutic Measure."

Sir William Japp Sinclair, M.D., for some years joint editor of the *Medical Chronicle*, and one of the founders of the *Journal of Obstetrics*, Professor of Obstetrics and Gynæcology at Victoria University, Manchester, who died on August 21, aged 66, left estate of the gross value of £856.

A CLINICAL LECTURE
ON
THE TREATMENT OF ICTERUS.

By G. HOPPE-SEYLER, M.D.,
Professor of Medicine in the University of Kiel.

[Specially Reported for this Journal.]

Gentlemen,—In jaundice there is usually an overflow of the bile constituents, especially bilirubin, into the blood current and connective tissues, caused by some hindrance to the flow of bile from the liver, often complete blocking up of the bile passages, and consequent stasis of the bile in the bile ducts. The simplest case is that blocking up of the bile in the choledochus by gall stones, parasites, or tumour. In infection of the bile ducts also they get blocked through inflammatory swelling of the mucous membrane and the submucosa, especially the lower part of the choledochus. In intoxications also, retention of bile may play a part, as in lead-poisoning, from increased formation of biliary colouring matter, from destruction of the colouring matter of blood and consequent increased tenacity of the bile from excess of bilirubin (Pleiochromia, Icterus polycholicus) as then the bile flows too slowly, and in consequence over-filling of the smaller bile passages takes place. In infections and intoxications of the bile passages and the liver and for the passing over of the constituents of bile, injury to the liver cells also plays a part, which renders possible the passage of the bile into the blood or lymph capillaries. (Diffusion icterus, acathektic icterus, parapedesis of the bile.)

In intoxications with powerful protoplasm poisons (phosphorus, etc.) as well as in the severest inflammations of the parenchyma of the liver, wherein a rapid fermentative destruction of the parenchyma takes place, this injury occupies a prominent position. In long-standing congestive jaundice also through the injurious action of the bile constituents disturbance of the liver cells takes place, especially when very powerful microorganisms are present in the bile passages; this may go as far as acute atrophy. Here this damage to the cells may follow very rapidly. In simple bile stasis by blocking of the choledochus it may be comparatively late, even months after. But after every attack of jaundice we must take into account that the parenchyma of the liver has been more or less injured; this must be kept in mind and a plan of treatment must be instituted later on.

The most frequent form of icterus, jaundice, in common parlance, is catarrhal icterus. According to recent views it is caused by infection of the bile passages from the duodenum (especially coli bacilli). According to experimental investigations the excitors of the disease may pass from the blood into the bile passages, as with typhoid, paratyphoid bacilli. The connection with infectious stomach and intestinal diseases is of great importance, both from a prophylactic and therapeutical point of view.

For the treatment of icterus, therefore, the following points come into consideration:—

1. Removal of all infection and intoxications from the gastro-intestinal canal and the bile passages.
2. Overcome the stagnation of the bile current.
3. Protection of the parenchyma of the liver, so that this itself does not become diseased, by keeping away from it everything that would weaken it.
4. Attention to the absence of bile in the intestinal contents and to the different course of the decompositions that are the result of it. If the infection and its action on the bile passages is limited or has ceased the swelling of the mucous passages and the biliary congestion will become less or cease altogether. At the same time the parenchyma of the liver will be the more rapidly freed from the effects of the biliary stasis and the infection. If the absence of bile from the intestines is not sufficiently attended to greater decompositions of food material and the development of abnormal products of tissue change may follow, which will act deleteriously upon the liver by absorption from the intestines into the portal vein. And so attention to one point will have a favourable effect on the other disturbances.

The treatment in the most frequent form of jaundice—catarrhal icterus—will commence with removal of infectious and toxic material from the gastro-intestinal canal. For this it is best to order calomel (5 to 7 grains) the dose to be repeated if the result is not sufficiently active—if it does not procure a sufficient action of the bowels. If no action whatever follows, castor oil, rhubarb or senna must be given and assisted by enemata of water. Fever is frequently seen to subside after this. At the same time the heightened peristaltic action of the bowels also stimulates the muscles of the bile passages, so that evacuation of stagnated bile is possible when the swelling of the mucous surfaces of the bile passages is only slight. The bowels must now be kept open regularly, as otherwise the excitors of infection gain a stronger development and abnormal decompositions of the intestinal contents with fermentation and the development of foul products will take place. The purgative salts of the sulphate group—sodium and magnesium sulphate—are the chief means for this. Or the following:

Sodii Sulph. 20.
Infus. Rhub. 5 to 180.

One tablespoonful several times a day appears suitable.

In order to lessen the catarrhal irritation in the bowel and so get rid of the excessive quantity of mucus, bicarbonate of soda may be added. Carlsbad water answers excellently, the chief constituents of which are chloride of sodium, bicarbonate of sodium, and sodium sulphate. Its carbonic acid content at the same time excites peristalsis and makes it more palatable and more readily borne. Of this two glasses should be taken warm fasting in the morning; if there is constipation it should be taken cold a quarter of an hour before breakfast, or one or two glasses after dinner before the coffee. In better-class practice the natural water may be given, otherwise, a teaspoonful of Carlsbad salts may be given in half a glass of hot water with an equal part of Seltzer water. If there is diarrhœa to begin with calomel is still to be given first of all, then an astringent such as tannalbin, tannigen, bismuth subnitrate, 1 gm. several times a day, when the diarrhœa is persistent.

The Carlsbad water drunk hot appears to have a favourable effect on the diarrhœa. Cholagogues are then to be advised in order to satisfy the indication to remove the collected bile. The oleic salts sodium oleate, eunatrol, biliary acid combinations (Ovagal) are suitable for this. An excessive production of bile here is not indicated as this would only make the injurious effect of that which has accumulated worse. If eunatrol, cholelysin and similar medicines act favourably, it is only on account of their purgative action. Podophyllin, which is so much thought of, can only act in this way as it has no effect on the secretion of bile itself. The cholagogue tablets, which contain calomel podophyllin, act in the same way. In a similar way the secretion of bile is not increased by giving large quantities of water, but it is still indicated for washing out the system. The water enemata recommended on these grounds of 2 litres of water and given several times a day (Mosler, Krull) especially when they are given cold, independent of their evacuant action, only have the effect of exciting the peristaltic action of the bowels and bile passages. With the large mass of remains of food, which have been retained, or but slowly evacuated through exclusion of the bile from the intestinal tract they are therefore very suitable. If the evacuations are very hard oil enemata up to $\frac{1}{8}$ or $\frac{1}{2}$ litre are made use of.

So long as there is any fever Preissnitz applications are useful, also later hot ones such as meal poultices, thermophores, etc., over the region of the liver.

On the other hand, the usual physical remedies, massage, electrisation of the liver and gall-bladder promise but little; they may even have an injurious effect from irritation of the liver and bile ducts.

So long as the jaundice persists, rest is of great importance as regards the liver. Especially when fever is present absolute rest in bed is necessary, and it is well to continue it so long as bile pigment appears in the urine; the bile passes freely into the intestines and the motions are intensively coloured with it. Otherwise there is the danger—although it is by no means a frequent occurrence—that serious symptoms of degeneration of the liver and autolysis, acute atrophy of the liver may show themselves, although they are not of frequent occurrence.

The diet must be suited to the changed condition, to the infection, the biliary stasis, and the changed conditions of digestion consequent on the absence of bile in the alimentary canal. It should not contain any strong spices or alcohol which excite the liver and bowels, the food should not readily undergo decomposition, must contain but little indigestible material and but little fat, as this when the bile is shut off is not readily absorbed and so leads to decomposition. It is true that the faculty of splitting up fat is retained, but resorption is difficult, perhaps from absence of the bile acids. At the same time milk, in spite of its fatty constituents, is always well borne, especially in the form of milk gruel, or prepared with sago, rice, groats, or cornflour. Oatmeal gruel, Quaker oats, best also prepared with milk, barley water, pearl barley, etc., are also suitable. Biscuits may be given at the commencement, later a little toast with a very little butter.

The digestion for meat should not be very much disturbed, but it often is. Possibly a simultaneous disturbance of the vessels of the pancreas may account for this. There may be also gastric disturbances at the same time whereby the power of digesting meat, especially in its raw state, may be upset. In icterus many considerable disturbances take place in the intestines, which lead to toxic decompositions, which again lead to further disturbance of the liver. In any case, jaundiced people often show a repugnance to meat. In many cases of jaundice, too, there is an excessive production of acid in the stomach, whereby the above-named disturbances appear more rarely. In place of meat eggs might be given, and in place of fats, starchy foods or biscuits, rice, etc. It must be borne in mind, however, that the fermentation in the intestines will be greater with this diet, and that the meteorism set up will be distressful to the patient. For this reason it will be well to vary the diet as much as possible before the disturbances become of any account, and change to an egg diet for a time. A free supply of liquids is proper in the shape of milk, buttermilk, alkaline mineral waters, fruit juice, tea, etc., whilst alcoholics must be avoided.

When bile is again emptied into the bowel fat may again be given and the ordinary diet gradually resumed. But one should still be careful to avoid readily decomposable foods, such as many kinds of meat, cheese, fish, sausages, in order not to set up a catarrh of the intestines, and through that a relapse on the part of the liver.

During the whole time the jaundice is at its height, therefore, something like the following diet should be prescribed:—Breakfast: Milk with tea or cocoa, biscuit or rolls, or a lightly-boiled egg. Early lunch: Milk or soup, clear or thick, with an egg. Lunch: Milk soup with rice, semolina, sago, bouillon, thick soup, lean meat, mashed potatoes, macaroni, easily digested vegetables, such as spinach, cauliflower, carrots, etc., light (not fatty) milk puddings. Afternoon: A little milk with biscuit (rusk). Evening: Milk soup, thick soup, or tea with milk, white bread, a little butter, lean meat and egg. During the first febrile stage it is best to give nothing but milk soups, oatmeal gruel, bouillon, and a little biscuit.

During reconvalescence one may give at midday a little more meat (beef or game), light vegetables but not cooked with fat, some cooked fruit. If the case is one in which the infection is more severe, with purulent inflammation of the bile passages (cholangitis suppurativa), it is best to give some preparation of salicin: Sodium salicylate, aspirin, salol $1\frac{1}{2}$ to 3 gm. pro die so as to act on the excitors of the inflammation by the passing of salicylates over the tracts. Menthol, which has a similar action and passes into the bile, can hardly be given without irritation of the stomach and bowels. A copious supply of liquids, especially in the form of the alkaline mineral waters, is useful in order to remove the toxic material from the system as quickly as possible. If this line of treatment, however, does not answer the purpose quickly and carry off the infected bile, it must be done by drainage of the hepaticus as recommended by Kehr, the formation of a biliary fistula, which can be made by passing the thermocautery into the liver.

Icterus infectiosus or gravis (Weil's disease), besides the dietetic treatment required for catarrhal jaundice, demands special attention to the greater infection which is associated with high fever. This, like typhoid fever, requires cold water treatment, cool baths, packings, cold water pillows, or antipyretics such as quinine, salicyl preparations, etc. Epidemic jaundice mostly resembles the catarrhal form, demands the treatment of that form; when it resembles the grave form the treatment of that form must be given.

In the matter of essentials the jaundice must be treated in the same way when it occurs in the course of other infective diseases, such as typhoid, recurrent fever, pneumonia, septic pyæmia, regard being always had to the main or original disorder.

Icterus in syphilis may be the expression of a chronic cholangitis and pericholangitis with extension of the inflammation and growth of connective tissue on the acini of the liver or pressure of enlarged portal glands on the hepatic duct. Besides potassic iodide and mercury, and if need be, salvarsan, a careful mode of life and a suitable diet must be aimed at, in order to protect the liver, weakened by the disease, from injury and prevent the onset of acute atrophy. Many cases of hypertrophic cirrhosis of the liver may be traced to syphilis, and are to be treated correspondingly. The fever subsides in cases of this kind with the greatest certainty with large doses of potassic iodide. Icterus in new-born children, when it runs a bad course and frequently or regularly comes on in children of the same parents, gives rise to a suspicion of syphilis, and should therefore be treated specifically.

The forms of icterus in consequence of excitement or mental disturbance or menstruation, appear as the chronic icterus that runs in families; it usually requires no special treatment beyond great care and a regulated mode of living.

In the case of various poisons: Arsenic, phosphorus, fungus poisoning (helvellic acid from helvella, phallin from agaricus phalloides), hydrazin phenylhydrazin, aniline and its derivatives, quinine, tuberculine, etc., there may be jaundice, in which the poison is to be got rid of as speedily as practicable or care taken to prevent further ingestion of it, so that the diet should be as mild as possible.

In conclusion, it should be mentioned once more that the appearance of jaundice, even with absence of any general disturbance, is always a warning to be cautious; it demands that its cause should be discovered, and that the patient be kept under observation, whilst a corresponding suitable diet and mode of life should be prescribed. For diseases of the bile passages that may appear of little importance may lead to serious disease of the liver (acute atrophy), which, considering the importance of the organ in the economy of the body, may be very dangerous.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by W. Langdon Brown, M.D., F.R.C.P., Physician to the Metropolitan Hospital and Medical Registrar to St. Bartholomew's Hospital. Subject: "Jaundice."*

ORIGINAL PAPERS.

CONCERNING DIET IN NERVOUS DISORDERS.

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General Considerations.

The astonishing neglect of the scientific method in the therapeutics of nervous disease is nowhere more striking than where diet is concerned. Grasset's work, bristling with references, devotes hardly a page, and that in only the most general way, to the subject of alimentation. Oppenheim's scattered remarks about diet are traditional, merely indicating that he has given no real thought to the significance of the subject. Of works in English the unsatisfactory nature must be known to all. It is true that a few scattered articles, more especially in the French literature, have drawn attention to the importance of a diet mainly of milk and vegetable products in persons supposedly predisposed to nervousness, by a constitution which the French call arthritic, and former English writers lithemic. But since the work of Weir Mitchell, I know of no important presentation discussing the *rôle* of diet in the management of the sufferers from affections of the nervous system. Moreover, the conclusions of *Fat and Blood* were largely empirical and cannot be entirely endorsed in the light of our better recent knowledge. The irrationality of forced feeding, even in tuberculosis, is established, and the practice has lost favour. The idea of nerve starvation has been found to be only partially correct; for the defective activities of the nerve elements are now generally attributed, not to deficient aliment, but to excess of waste products or other deleterious substances. That is to say, intoxication has become a dominant interpretation.

I am not prepared to say how far the not infrequent success of the Weir Mitchell method can be accounted for on this principle, for the method is one with many factors and was applied to a variety of cases differing in pathogenesis. But many of the failures of the method may perhaps be accounted for by the presence of a toxicosis which none of the numerous procedures reached, or which was, perhaps, even exaggerated by the abundant diet ingested. We are well aware that in depleted conditions, even when these are toxicogenic, large amounts of nourishment can be assimilated. Convalescence from wasting diseases is a familiar illustration.

Studies in metabolism have shown us how badly balanced is the diet of the average prosperous city dweller of our day. Excess of proteids and deficiency of carbohydrates, and sometimes of salines, is the rule. When the defences fail, conversion of the proteins into the proper aminoacids is incomplete, and the substances produced may act as nerve poisons. In these cases the caloric needs of the body may find better fulfilment in an abundant diet of carbohydrates within the limits of hepatic tolerance. An addition to the fats may also be beneficial within limits. Of the latter, those selected should be of low melting point; otherwise, in neurotic patients, intestinal sand—a misnomer, for in reality the grains are soap—may form, and a mucous colitis appears. This connotes a waste of the intestinal secretions used in saponification. The best fats are olive oil and butter fat; but the carbohydrates should be the mainstay as a rule.

Unfortunately, too, many of the modern consumer's carbohydrates are supplied in a form which emasculates from them substances of great advantage. It is a pity that experimental proof of this opinion has been lacking until recently, so that due weight was not given it by most physicians. Even the extensive clinical and laboratory investigation conducted in England recently to establish the relative merits of bread made from commercial flour and that from whole wheat, permitted of no definite conclusion, for attention was too largely confined to the caloric value of the result in bread. But that there is a substance of great importance for nutrition in that part of the cereal which is usually rejected in commercial preparation is now experimentally proved by the production of the nerve degeneration in animals fed solely upon polished rice.

Almost in the nature of an experiment is the abolition of beriberi in the compounds where coolies receive unpolished rice instead of the polished product, under the consumption of which beriberi prevailed. The former supposition that the disease arose from a fungus in the rice seems to have been disposed of by the experiments. Moreover, the substance which prevents the beriberi, if we may accept the nerve degeneration in animals as of the same nature, is inseparable from the rice polish by solution in alcohol and water, although its nature is not yet ascertained.

Further evidence that whole cereals contain a nutritive substance of importance for the internal secretions is furnished by Chalmers Watson's researches into the growth of the thyroid gland under different diets. He showed that on an exclusively flesh diet, thyroid gland of young rats underwent hypoplasia, whereas when oatmeal was the exclusive diet, the gland developed freely. The latter animals greatly exceeded in growth and capacity those fed only on flesh.

Although I do not know of experimental verification, it is legitimate to infer from the foregoing facts (as we know that an animal fed on carbohydrates alone emaciates and dies quickly) that a substance of great value to the nervous system in particular is removed in the milling of grains, and that this cannot be replaced adequately by the addition of flesh. Whether this substance exerts its action as a direct nutrient, or through the medium of the hemopoietic or other glands of internal secretion, we do not know; but to the therapeutist, this is of less interest than the conclusion itself. For in the regulation of the activity of the nervous system, the secretion of the thyroid gland is an essential. Many cases formerly designated neurasthenia and hysteria are now known to be merely due to changes in thyroid secretion.

Were one to speculate, it might be supposed that the prevalence in our day of hyperthyroidism expressed the response of this gland to a vascular environment which insufficiently supplies it with pabulum for the work the body requires of it, and that it responds by a secretion which makes up in abundance for what it lacks in quality, and thus inaugurates a vicious circle which maintains itself.

One cannot here enter into the qualifying factors of this hypothesis, those, for example, furnished by fear and anxiety in stimulating the thyroid secretion.

Other important substances in the portion commercially removed from grain are calcium and the phosphates. Although these are present also in flesh, yet to obtain them in adequate amount from this alone would entail a greatly excessive ingestion of proteid. The thoughtless appeal to the carnivora as an example of eubolism forgets that these animals eat the bones as well as the flesh. Now the bran is the bone of the wheat, hence many modern diets lack enough of phosphates and of calcium.

Now, experiments have shown that calcium is one of the stabilisers of nerve activity, while potassium and sodium are its excitants. Phosphates are known to be a necessary pabulum of nerve. Is it not evident, then, that what clinicians call weak irritability must ensue when stabiliser and pabulum are deficient?

Deprivation of any necessary aliment leads to craving. The conscious expression of this may not be directed towards that which is lacking. It often expresses itself morbidly, such as in desire for alcohol, or in the peculiar longings of the gravid woman. It may manifest itself psychologically, as in the feeling of incompleteness of the psychasthenic.

Psychic Surroundings Must be Favourable.

This leads us to a most important matter in dieting against nervous disorders. As it is not ingestion, but assimilation, at which we must aim, all the factors which make for this must be employed. Most important among these is enjoyment of the food. It must be cooked and served appetisingly. But even this is not enough: the psychological surroundings must be favourable. Dejection or anxiety are most detrimental to proper digestion. To corroborate this clinical opinion, we now have the experimental data of Pawlow. But we must avoid the other extreme of an excessive gaiety or cheerfulness during the meals of neurotic or excitable persons, for the mental activity thus stimulated is not the most favourable state for good anabolism.

Preparedness for Food; Exercise; Intervals between Meals.

The highest degree of preparedness for proper assimilation occurs only when the digestive glands are free from the incubus of a preceding meal. A loaded liver and an exhausted pancreas are not favourable. The rapid circulation and oxidation produced by active exercise are the best preparation for the proper assimilation of food. It should be evident that the frequent ingestion of food is detrimental to those persons susceptible to alimentary poisoning and its nerve inadequacy. By perseveringly stimulating proper oxidation a patient is soon able to tolerate in the stomach without fermentation a large enough meal amply to nourish him for a period of four to five hours. The error of feeding oftener may be brought home by thinking of the modern practice which forbids even infants to be fed oftener than once in three hours. Prolonging the intervals is the best preventive of food fermentation.

Firm Foods Required: Causes of Bolting.

Of course, some of the food, at least, should be of firm consistence, so as to demand vigorous mastication in order to stimulate salivation. This prevents the bolting of food, a habit to which nervously impulsive persons are liable. Sometimes this habit has been bred in childhood because of the child's haste to finish his meal in order to play. The acquisition of this habit is much facilitated by a soft or pultaceous type of food, such as is so commonly employed nowadays. To bolt a hard crust is impossible, and a piece of tough meat most unpleasant.

The habit of bolting food is part of a vicious circle, for it leads to mal-assimilation, which causes nervousness, which leads to impatience, which favours the bolting of food. The remedy is simple enough: it is to eat dry and hard foods, or, failing that, to master the weak impulsiveness which permits one to bolt.

Special Indications: Avoid Formulæ.

In prescribing special diets, rigidity should be avoided. A narrowly restricted diet may be felt monotonous and breed disgust, which may produce a psychogenetic dyspepsia in a susceptible neurotic. The patient should be explained the principles on which he must diet himself. If he is uninformed or unintelligent a list of substances may be given him in addition. But even then, the rationale of what he is to follow should be explained. The ready printed lists of certain textbooks, specialists, and pharmacists are an abomination no better than the ready-made prescription. Just as he who is trained in pharmacology will prescribe to fit the patient, instead of making the patient fit an arbitrary prescription, so he who is trained in dietetics will diet each patient, and not make the patient accept an empirical list obtained from the fancied authority of some publication.

This does not mean the negation of all rules. I conclude, therefore, by considering some neurological conditions in the treatment of which dieting is essential to success, and by setting down the nature of the diet suitable to each.

The differences between the diets in these conditions are very small. This, however, only accords with the fact that the human organism as a biological unit functions best when the various types of food which constitute its pabulum are proportionate to one another in a ratio which is pretty definite for the healthy human being.

Now, as pathological states only represent an organism's reaction to noxious influences the optimum diet for good health when in health is only rarely to be departed from, even in diabetics, where this departure is perhaps the widest of all, the prognosis becomes favourable inversely as the necessity of departure from the carbo-hydrate standard of the normal human being. In adiposity, too, the fallacy of disproportionate abstention from carbo-hydrates and fats is now seen.

Diet for Epileptics.

With this understanding, then, consider in the first place the diet in epilepsy. I shall not consider such symptomatic epilepsies as arise from coarse lesions of the brain, or those which occur in cases of defective development; although even in these favourable diet can mitigate the patient's lot. While we believe that epilepsy is fundamentally toxigenic, yet we do not know whether it is manifested because of increased cerebral susceptibility, or whether it occurs because of weakened defences against the absorption or neutralisation of food toxins. Practically, however, it is clear that most patients are benefited and many cured if, before it is too late, a diet is imposed which minimises the work of the metabolism of proteins more especially during the subsidence of the vital activities during sleep. This diet should, at the same time, facilitate rapid exchange by an abundance of the saline constituents of the diet.

Empirically, it has been known how favourable to such patients is an abundance of fruit and vegetables and a restriction of meat. But failures in the application of diet of epileptics occur unless other proteins than meat are not restricted also; and unless the fruits and vegetables are chosen for their saline quality. Thus, an epileptic fed upon potatoes, eggs, milk, and tasteless fruits would be, perhaps, even worse off than one on the average mixed diet. The diet I recommend is somewhat as follows:

On rising, half a glassful of hot water containing 10 grains sodium bicarbonate.

Breakfast: Large plate non-acid fruit with cream; large plate cereal and milk; toast; no coffee, tea, or chocolate.

Dinner: No meat soups or gravy; 4 ozs. well-cooked meat or two eggs, large plate green or succulent vegetables, potatoes, not greasy; sweets, no gelatine.

Supper: Similar to breakfast, but macaroni or other paste or rice pudding may be taken for cereal, and one egg may be taken also. Graham bread thrice weekly. Distilled water to be taken freely between meals.

At night: Half a glassful of hot water containing 30 grains potassium citrate.

The chlorides of the average diet should be restricted. They are apparently harmful to those prone to epilepsy; for although the hopes aroused by the first recommendation of their deprivation have not been realised; yet many arrests of fits have occurred under a salt-free diet. When it is remembered that a chlorine balance is well maintained by daily ration of 1½ grammes, that the amount in the usual diet is 10 grammes, and that where renal inadequacy exists, œdema quickly supervenes when the excretory capacity of the kidney is exceeded, it should be evident that reduction of common salt is a rational procedure in a disease where cerebral œdema has been found so frequently as 22 per cent. of cases operated in. Some authorities attribute the comparative advantage of milk to its poverty in sodium chloride.

Diet against Arterio-sclerosis and Pressor Excess. (a)

A potent cause of nervous inadequacy is arterial hypertension. The *rôle* of diet in producing this seems to be important. Both purins and excessive nitrogen seem to lead to the formation of pressor substances. Whether they do so by increasing the activity of the adrenal glands is unknown; but it is an explanation to be thought of in connection with this state, which is so frequently found in late middle life. It is often misnamed neurasthenia.

When the renal in addition to the hepatic function is diminished, nervous symptoms as the result of an unwise diet are even more apt to declare themselves; so that the regulation of the diet, then, is of even greater importance. The milk commonly given as the basis of an adult diet is unwise. In the first place the nitrogen content of cow's milk is disproportionate, and it is poor in iron and some other mineral elements. In the second place, it does not demand mastication and the relish which comes with this.

Diet in Cases of Drug Addiction.

The craving for morphine or alcohol has often a basis in metabolic disturbances due to a diet or manner of eating which, though usual enough and without apparent injury to the average person, is yet highly injurious to the person in question. I believe that relapses after successful sanatorium treatment are frequently due to neglect of this factor.

The Period Depressions and Excitements, Cyclothymic and Manic-Depressive Psychosis.

The lack of more extensive data regarding the dietetic factor in these cases is regrettable. For the *rôle* of diet as the exciting cause, and the means of cure in the subjoined case is most impressive.

Case.—*Recurrent Mania from Gluttony.*—S., the wife of a clergyman, was seen at the York Retreat during my residence there in 1907. For several years she had recurrent attacks of excitement with rise of temperature, rapid pulse, disorderly acts, filthy ways, obscene language. These would occur at the menstrual period, but only every month, and sometimes less frequently. Preceding and during the attack the leucocytes in the blood were greatly increased. On one occasion 37,000 to the cubic millimetre were found. During the subsidence of the attack, in about ten days, the count would be normal. Between the attacks the patient might be regarded as normal, although her disposition was somewhat selfish and unreliable. No cause for her attacks had been discovered. The patient had been, two years before, placed upon a strictly vegetarian diet without any benefit; for the principles embodied in this article had not been duly considered in the prescription of the diet.

In the search for a cause, I one day minutely questioned a nurse concerning the habits of this patient, who, on account of the freedom given her between attacks, was not under continuous observation by anyone. I was told that she spent her afternoons in passing from one pavilion to another, taking tea in rotation with the nurses. On each occasion she would eat abundantly of what was on the table, and this would go on most of the afternoon. Moreover, she would spend all her money on sweetmeats, and often more substantial things, which she would eat during the morning, seldom offering any to another person.

From these data I theorised that her maniacal attacks were the expression of the outburst of accumulated toxicosis, due to her gluttonous habits. They were precipitated by the toxic wave of the menstrual period; but they did not occur every month, because during the maniacal attacks the patient was practically starved, and insufficient time elapsed before the next menstruation to allow of sufficient accumulation to produce toxicosis.

Whether these were secondary effects of bacterial action, the defence against which was broken down by the excess of food, or whether they were purely biochemical in mechanism, we did not determine, for we were primarily concerned with practical therapeutics. The result fulfilled the expectations of the theory, for the patient's indulgence was prevented, the attacks ceased, she returned home, and my latest advice a year ago was that she remained well.

In a case of recurrent confusion with delirium, referred by Dr. Heiberger, where saburral tongue was marked, improvement did not occur until the diet was reduced to one exclusively of abundant fruit and only three glasses of milk per day.

In another case of recurrent mental confusion, referred by Dr. William Mason, improvement was *pari passu* with the reduction of nitrogen in the diet. Each time an increase was attempted the confusion and delirium returned.

Psychasthenia.

The sense of incompleteness or inadequacy which is the basis of psychasthenic manifestations has, I believe, often other origin than the psyche. Even the *angoisse,* that prominent emotional characteristic, may not be psychogenic. A general uneasiness may be purely physical in origin.

Stcherbak's case, where psychasthenia was provoked several times by caffeine, is an example. Likewise is that of a child of two years, which I reported to the Society of Psychology of Paris, and later published in *Pediatrics* here. I have noted several times recrudescence of symptoms in psychasthenia after errors in diet. Either starvation or excessive protein aggravate the symptoms. Of course they do not create psychasthenia; but they lower what Janet calls the psychological tension, which thus permits the mental vagaries so characteristic of this disease.

The dietetic poisons, of course, are badly tolerated by such patients, who should abstain from tea, coffee, cocoa and alcohol, which not only disturb nutrition, but interfere with neuronal activity.

"Nervous Children."

The difficult psychic management of the unstable child may be completely vitiated by want of care in very simple dietetic needs. Starvation, too frequent meals, too heavy a ration, excess of protein or extractives, all subtract energy from the cerebrum, where it is needed for dicipline. Toxins and peripheral irritations are not conducive to mental activity or emotional tranquillity.

(a) See *Va. Semimonthly,* 1911; *Transactions Am. Therapeutic Assoc.*

Hysteria.

Although the disorders we term hysterical are purely psychological in origin, yet the hyper-suggestibility on which they depend varies greatly with physical states. Diet has a marked influence on these. In the psychomotor discipline against hysterisability, disburbances due to faulty diet are a great handicap. A case may well be ruined by failure of due attention, without which the best psychotherapy may be unavailing. Illustration is afforded in the cases I cite.

A case of hysterical spasm, where psychomotor discipline was unavailing until a faulty diet was rectified, has been recently reported by me in *Surgery, Gynæcology, and Obstetrics* for March, and *Washington Medical Annals* for January, 1912.

A case where hysterical absences were much aggravated by lapses from a strict diet was that I reported in *International Clinics*, Vol. III., 1908. The moody behaviour of this patient could be controlled by psychotherapy only when this was not interfered with by the handicap of neurones below the highest efficiency procured by what was the antithesis of that animadverted upon in "Love's Labour's Lost," when Shakespeare makes Fernando say: "Fat paunches make lean pates, and dainty bits make fat the ribs and bankrupt quite the wits."

Psychotherapeutic re-education demands the wit of patient as well as of physician. A psychotherapy which permits sick minds to become more so by leaning upon the suggestions of another is a poor thing.

When the energies are deployed towards metabolic disposition, large quantities of nutriment are unavailable for concentrated mentality. As an exalter of suggestibility, feasting is as vicious as fasting. Of both means, the old religious organisaton were well aware empirically in managing the devotees.

Hemicrania and other Constitutional Headaches.

Most of these cases appear to be toxic. It is certain that the vast majority are greatly ameliorated by diet which enforces the principles just described. Even when a psychogenic factor is manifest, the bettering of an unfavourable diet may remove at least the headache from the sufferings of such patients.

An instance is that of a young woman whom I saw with Dr. J. S. Dye, at Chattanooga, in October, 1911. Headaches, which apparently nothing could prevent, were brought on by recurrent painful psychological situations beyond medical control. In spite of the continuance of these, the headaches were prevented after about two months of the special diet I recommended.

Perseverance, however, is often needed. Charles Mercier goes the length of saying that by faithfully following instructions for six months every case of metabolic heachache is curable.

When the blood pressure is considerably raised the effect is particularly favourable. Such a case I saw with Dr. S. S. Gale, at Roanoke, November, 1911. A very stout, middle-aged woman had suffered intensely for almost two years with constant and violent headaches. On account of her stoutness, carbohydrates had been restricted for some time. I advised, on the contrary, a restriction of the proteins. The consequence was vast improvement as regards headaches, without increased adiposity.

Headache complicating other affections is susceptible of the same treatment. Thus, a middle-aged woman referred by Dr. Davis, of Washington, for writer's cramp, and who was cured by psychomotor discipline, as described in *Journal für Neurologie und Psychiatrie*, suffered also from periodical hemicrania, which interfered with her treatment. This was very rapidly removed by the proper diet I have described.

I have not succeeded, however, in curing every case, as Mercier believes possible; but perhaps my diagnosis has been in error when the treatment has failed, and an organic cause I could not detect has been present.

Nervous Dyspepsia.

The majority of such cases, where organic changes have not been overlooked, are in reality mental or emotional in origin. They are phobias of hysterical or psychasthenic type usually. Hence dietetic insistencies only aggravate them. A wise psychotherapy teaches them to put their stomachs out of their heads. Stomach specialists are tempted to ignore this feature of such cases, which require a careful analysis of their minds rather than of their stomach contents.

A NOTE ON THE BACTERIOLOGY OF THE UTERINE CAVITY IN FIBRO-MYOMATOUS DISEASE.

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Surgical Registrar to the Middlesex Hospital.

This investigation was undertaken with the object of ascertaining whether micro-organisms were present with any frequency in the uterine cavity, or in the cervical canal, when the uterus was the seat of fibromyomata; and whether such organisms, when present, coincided with the occurrence of complications, either pre- or post-operative.

Pre-operative complications, or the complications to which the uterus and its adnexa are liable, due to the presence of "fibroids," may be arranged under three headings—viz., (1) hæmorrhage; (2) the results of infection; and (3) mechanical effects. The last group comprises such phenomena as impaction, obstruction to labour, pressure effects, *e.g.*, on the bladder or intestine, axial rotation, etc., and are not of direct interest here. On the other hand, hæmorrhage and sepsis might conceivably be due to the presence of organisms demonstrable in the uterine cavity or cervical canal.

Bland-Sutton, in his work on "Tumours," states that the most serious hæmorrhages from uterine fibroids are associated with septic changes in the tumour, so that, in considering septic changes, one is also considering the hæmorrhages to which such changes give rise. Infection may be considered in its relation to (1) the tumour, and (2) the uterus and its adnexa. Infection of the tumour may result in necrosis and gangrene, with sloughing, and possibly extrusion of a small sub-mucous fibroid. The infection may extend to the uterine mucosa, and may ultimately give rise to a peritonitis *via* the Fallopian tubes and abdominal ostia. These changes are met with almost invariably in the sub-mucous variety, and result, according to Bland-Sutton, from extrusion of the tumour into the vagina, where it is exposed to the attacks of micro-organisms, and possibly rendered less able to withstand invasion by reason of the venous congestion induced by constriction at the external os uteri.

Other complications are hydro- or pyo-salpinx, while occasionally "fibroids" may be complicated by ascites. The red degeneration, commonly associated with pregnancy, has been shown occasionally to contain a staphylococcus albus by Hastings.

Some Continental observers believe that complications occur with much greater frequency than would seem to be the experience of English surgeons. Constantin Daniel, in a paper in the "Revue de Gynæcologie" on the state of the adnexa in uterine "fibroids," has collected most of the literature. But although he enumerates a long list of complications (pre-operative), yet he does not mention the name of a single micro-organism. On the other hand, he goes so far as to state that, "in the end bacteriology confirms microscopical examination, inasmuch as the examination of the cavity or the mucosa as carried out by Winter, Döderlein, and Wertheim, has never led to the identification of the micro-organism." And again, "it follows from what precedes, . . . that the 'so-called endo-metritis of fibroid uteri' of Swartz and Hepp could only be an aseptic endo-metritis, a nutritional alteration, which proceeds *pari passu* with the proliferation of the rest of the uterine parenchyma." He concludes that septic infection plays a very small part in the pathological findings in the mucous membrane of the uterus and tubes, and believes that mechanical causes are sufficient to produce the changes found (métrite et salpingite). He quotes Jones of Boston as saying that "he has found the adnexa to be diseased in every case of laparotomy for fibromyomata that he (Jones) had performed."

But in spite of such sweeping assertions, no mention is made of any micro-organism by name, nor is any account given of attempts to isolate organisms from such cases.

Of the post-operative complications conceivably due to the presence of organisms inside the uterus at the time of operation, hæmorrhage (secondary), peritonitis, and possibly thrombosis are of general interest, while of more special interest may be mentioned a vaginal discharge, persisting for some time after the operation. This discharge is often due to an infected suture in the stump of the cervix. This may be so troublesome as to necessitate the patient submitting to a further operation.

For these reasons it was thought of interest to examine bacteriologically the uterine and cervical cavities in a series of sub-total hysterectomies for fibromyomata, a series, however, if judged by the findings of Jones of Boston, remarkable for the paucity of complications found at operation.

The method of examination was as follows:—Immediately after the amputation of the uterus two sterile swabs were passed from above into the cervical canal in the stump of the cervix left in the pelvis. One of these was used to make film preparations, the other to inoculate a series of culture media. The amputated uterus was received into, and carefully covered by, a sterilised towel pending examination. The surface judged nearest to the uterine cavity, and as near the fundus as possible, was seared with a hot knife, and the cavity then opened; culture media were inoculated and film preparations made. (*a*)

Ten cases were examined and were not picked or chosen in any way. Seven cases were absolutely sterile (both uterine cavity and cervical canal), while in three cases organisms were isolated—in two instances from the cervical canal, and in the other from the uterine cavity. In tabular form the results were as follows:—

Case.	Uterine Cavity.	Cervical Canal.
I.	Sterile	Sterile
II.	"Colon-Group" Bacillus (sporing)	Sterile
III.	Sterile	Bac. coli.
IV.	Sterile	Döderlein's bacillus.
V.	Sterile	Sterile.
VI.	Sterile	Sterile.
VII.	Sterile	Sterile.
VIII.	Sterile	Sterile.
IX.	Sterile	Sterile.
X.	Sterile	(Not done.)

The organism isolated from Case II. (body) produced turbidity in broth, inoculated from the uterine cavity, in twenty-four hours. The remainder of the tubes remained sterile. The organism was a + Gram, motile, rod-shaped bacillus, producing indol in broth, coagulating milk and digesting the clot. A broth subcultured was heated to 60° C., sub-cultured on to agar-agar and gelatin, and the organism recovered from these, showing that spore formation was present. Probably this organism was non-pathogenic, possibly a contamination.

From Case III. (cervix) a pure culture of bacillus coli was obtained, conforming to all the general tests for that organism. Here again the presence of the organism was probably accidental, as in opening the abdomen at the operation a piece of small intestine was inadvertently wounded, and had to be sutured before the uterus was amputated.

The organism isolated from Case IV. (cervix) was Döderlein's bacillus. Discrete colonies appeared on the blood-agar culture on the fourth day. The organism was a large rod-shaped bacillus with a tendency to be curved, non-motile, and staining by Gram's method. Sub-cultures were successfully made on to ordinary agar-agar and blood-agar in broth and litmus-milk, but unsuccessfully on potato. In litmus-milk an acid reaction occurred in twenty-four hours, and a flocculent coagulum appeared in forty-eight hours. A rabbit and a mouse were inoculated, but showed no signs of infection, and were alive and well ninety-six hours after.

I have been unable to find any description of this organism either in those monographs of Döderlein's quoted in the English text-books, or a complete description in any one of such text-books, but a fairly complete description is found in Blair Bell's Gynæcology, and has been supplemented from Eden and Howard Kelly.

The organism called the vagina or Scheiden bacillus, is a rod-shaped organism, normally inhabiting the vagina and secreting lactic acid, which Döderlein thinks causes the acid reaction of the vaginal secretion. Interesting experiments have been carried out by Menge, who found that the bactericidal power of the normal vaginal secretion is very marked, and that pyogenic organisms introduced are rapidly killed. Blair Bell also states that the uterus is normally sterile. Eden states that this "Scheiden bacillus of Döderlein" is found in the white, flaky, acid secretion from the vagina in children and healthy pregnant women, that it grows only in acid media, and that lactic acid can be found in the secretion when it is present. He goes on to remark that it probably plays a protective *rôle*, antagonising the pyogenic cocci, either destroying them or paralysing their activities.

The following is a list of the cases, with a brief abstract of the notes. The operation performed in every cases was sub-total hysterectomy:—

Case I.—C. F., æt. 43, married, housewife. Duration of "lump," two years. Menorrhagia and metrorrhagia slight. The uterus contained several subperitoneal fibromyomata. There were no complications present at the operation, and none occurred after operation, the patient making an uninterrupted recovery.

Case II.—A. F., æt. 25, single, teacher. Pain in the back a periods for last twelve months. No tumour felt per abdomen. Menorrhagia not marked. There was some metrorrhagia; that occurring immediately after the periods was offensive. No complications present at operation, and none other after operation than a somewhat elevated temperature (99°—101°), not becoming normal till the eighth day. There was no vaginal discharge after operation in this case.

Case III.—L. C., æt. 27, married, housewife. Pain in abdomen for six months before operation. Some menorrhagia and metrorrhagia, the latter offensive three days before periods. During the operation a piece of small intestine was wounded in the opening of the abdominal wall.

The dressings on the second day after operation were stained with bright blood, and some blood oozed through the cervix into the vagina.

The highest temperature was 100.4° F., on the evening of the second day after operation. The temperature was not quite normal till the fourteenth day after operation, varying between 99° F. and 100° F.

Case IV.—(Döderlein's bacillus.) G. D., æt. 46, married, housewife. Tumour noticed first three years ago. No menorrhagia or metrorrhagia. Some frequency of micturition. Complained of headache on the third day after operation. The temperature remained high, varying from 99.8° to 101.4° until the twentieth day after operation, when the abdomen was found to be distended, rigid and painful, and dull above the pubes. Under an anæsthetic an incision was made in the posterior vaginal fornix, and 22 oz. of offensive blood liberated.

The temperature immediately fell to normal, and the patient made an interrupted recovery.

Döderlein's bacillus was isolated in pure culture from this blood.

Case V.—(Sterile.) E. W., æt. 37, single, unem-

(*a*) Identical series of culture media were used for body and cervix, and comprised gelatin slope, agar slope, blood-agar slope, glucose-agar stab, and peptone broth. The blood agars were made freshly for each case, and included a control tube. The glucose-agar stab cultures were covered in with melted agar-agar, and used as anærobic tests. The tubes were incubated and examined after twenty-four hours' incubation, when, if no growth were apparent, they were "capped," re-incubated for a fortnight, and examined for growth daily during this period. If no growth had taken place at the end of the fortnight they were accounted sterile.

ployed. Menorrhagia and metrorrhagia commenced three years ago. The metrorrhagia was slight and somewhat offensive. Nothing noteworthy about the operation. After operation the highest temperature (100° F.) occurred on the eighth day, and was normal on the ninth day, but on the fifteenth day it shot up to 100.2° F. again, coinciding with the occurrence of a thrombus in the left leg. Otherwise an uninterrupted recovery.

Case VI.—(Sterile.) A. R., æt. 33, married, housewife. Three weeks previous to operation patient was delivered of a full-term child, and had been running an evening temperature varying between 99.8° F. and 100.6° F. This, after operation, came down to normal on the evening of the second day. She then made an uninterrupted recovery.

On account of the pre-operative temperature it was deemed extremely likely that organisms would be found in the uterine or cervical cavities, and in consequence the examination was made with every care, but proved negative.

The remaining four cases were all sterile of organisms, and presented no features of interest either before or after the operation.

Case VII.—(Sterile.) E. H., æt. 42, single, house work. Metrorrhagia for eighteen months. Temperature, after operation, normal on fifth day. Uninterrupted recovery.

Case VIII.— (Sterile.) M. M., æt. 40, married, housewife. Menorrhagia for two years. Tumour noticed for one year. Leucorrhœa for last six months. Here, again, although leucorrhœa was present, no organisms were found. Temperature normal after operation on furth day. Uninterrupted recovery.

Case IX.—(Sterile.) M. H., æt. 30, single, maid. No duration given in notes. The fibroid was of the cervical variety. Temperature normal on fourth day after operation, and patient made an uneventful recovery.

Case X.—(Sterile.) M. P., æt. 41, single, parlourmade. Tumour noticed four years ago. No menorrhagia or metrorrhagia, in association with which it is interesting to note that the tumour was a sub-mucous fibroid and was very large. There was a good deal of hæmorrhage during the operation, and for this reason it was not deemed advisable to prolong the procedures by taking swabs from the cervical canal; the uterine cavity alone was therefore examined.

The temperature was normal on the sixth day, and the patient then made an uninterrupted recovery.

From a consideration of the table it will be seen that seven out of the ten were absolutely sterile, while in two of the three cases in which organisms were found their presence can most probably be explained as contaminations. For instance, in Case II. the organism showed definite spore formation, which is enough, in conjunction with its other characteristics, to class it as non-pathogenic, and probably therefore a contamination. (*a*)

It may possibly have been living a saprophytic existence in the uterine discharges, and the history that the metrorrhagia was offensive is in favour of this.

In Case III. a pure culture of bac. coli was isolated from the cervical swab, but the operation was complicated by the wounding of a piece of small intestine.

As regards post-operative complications, these were present in three cases—viz., III., IV., and V. Case II. (sporing bacillus) displayed a somewhat elevated temperature after operation, not reaching normal till the eighth day, not, however, at any time very high (99° F. to 101° F.), otherwise it presented no abnormal features. Case III. (bac. coli) was marked by secondary hæmorrhage, which made its way out through the cervical canal, and also through the abdominal wound. The temperature remained slightly elevated, not remaining normal until the fourteenth day after operation.

Case IV. (Döderlein's bacillus) had well-marked secondary hæmorrhage, enough to form a pelvic hæmatocele containing 22 oz. of offensive blood, from which the organism was again isolated. The temperature here remained isolated (99°—101.4°) until the hæmatocele was evacuated on the twentieth day; after this it immediately fell to normal.

Case V. was complicated by a thrombus in the left leg. No organism was isolated in this instance.

The other six cases made perfect and uneventful recoveries, and in none was any organism found.

Generalisations from a series so small as the present are apt often to be erroneous. The most that can be said is that in the majority of cases of uterine "fibroids" the cavity of the uterus and the cervical canal are sterile, but that organisms, when present, may produce secondary hæmorrhage, or be the cause, possibly, of an elevation of temperature, prolonged somewhat beyond the period of post-operative or "traumatic" fever met with in the first few days of convalescence from any aseptic major operation, but that complications such as thrombosis may occur in the absence of such organisms.

It seems probable that one may ignore as negligible the danger to be feared from the cut cervix, and that here, as elsewhere, the micro-organisms most to be feared are those introduced at the operation.

(*a*) The only pathogenic rod-shaped bacilli which produce spores are tetanus, anthrax, malignant œdema, and bac. enteritidis sporogenes. The pathogenic members of the colon group to which the above organism was most closely related do not form spores.

COLLOID SELENIUM IN THE TREATMENT OF CANCER.

By M. LAURENT, M.D.;
Physician to the Havre Hospital,
AND
J. BOHEC, M.D.,
House Physician.

We have under our care a patient suffering from a new growth in the stomach, causing much pain and general disturbance, in which the employment of selenium in the colloid form, in accordance with the procedure devised by M. André Lancien, afforded so much relief, and determined such a marked improvement that the effects appear to us to be deserving of publication. We cannot do better than to give brief notes of the case.

The patient, a man, æt. 41, by profession a blacksmith, stated that he had always enjoyed good health until the onset of his present illness. His mother had died when 57 years of age, of cancer of the stomach, one year after undergoing gastro-entero-anastomosis. He denied having had syphilis, and was not addicted to alcohol, and he had been strong and robust until October, 1911.

His troubles began, without obvious cause, with acute severe stabbing pain in the epigastrium, which was also felt in the back. This pain radiated towards the hypochondria, and round the waist, and came on half or three-quarters of an hour after eating. It was accompanied by vomiting of food and other dyspeptic disturbances, anorexia, repulsion for fats and meat. The pain persisted between meals in a rather different form, being heavy, continuous, with a feeling of weight. It came on in paroxysms with exacerbations, followed by the vomiting of watery, glairy, bilious matter, the attacks of sickness lasting from ten minutes to half-an-hour. These gastric attacks, which were often very severe, were specially pronounced at night, coming on five or six times during the hours of darkness, effectually preventing sleep. He managed, however, to go on with his work until November, 1911, when he was obliged to take to his bed on strict milk diet. The rest and diet afforded him a certain measure of relief, whereupon he returned to work, though in a more or less perfunctory manner, the attacks of gastric pain forcing him to lay up from time to time. After a time these attacks became aggravated, lasting from half an hour to two hours, or even all day, and especially all night.

On March 30th, 1912, he was admitted to the wards of the General Hospital. Under the influence of rest, diet, and treatment (bismuth, an effervescing mixture, stovaine, Indian hemp, chloroform water, &c.), the intolerance of food subsided somewhat. The patient had never had hæmatemesis or melæna, and the bowels were fairly regular, the stools being blackened by the bismuth he was taking. On examination no actual tumour could be detected, but there was well-marked tenderness over the epigastrium, with some enlargement of the liver. There was nothing to suggest incipient locomotor ataxy and no enlarged glands.

As the gastric crises tended to become progressively more violent, and as their intermittent, paroxysmal character and nocturnal incidence were suggestive of a specific origin, he was given fifteen intramuscular injections of bin-iodide of mercury. He left the hospital at his own request on May 4th, 1912, slightly better, the improvement no doubt being due more to rest and diet than to treatment. . He tried to work, but had to cry off two or three days a week, and was constrained to apply for re-admission on June 24th, 1912.

His state was manifestly worse than when first seen. There was obvious loss of strength, and well-marked emaciation, and the intolerable pain from which he suffered was only partially and temporarily relieved by hypodermic injections of morphine. We witnessed some of the attacks, during which the patient writhed on the bed, turning over and over in search of ease. He was put on the same treatment as before—viz., 2 or 3 drachms of carbonate of bismuth a day, with mixtures to relieve the sickness, a further series of biniodide of mercury injections followed by fifteen injections of hectine, but without any tangible benefit.

Clinical examination of the patient and exploration by means of the X-rays revealed the presence of a tumour of the wall of the stomach. After consultation, it was decided to try colloid selenium (seleniol), and a first, intravenous, injection thereof was given on August 15th, 1912. One hour after the patient complained of very severe pain in the pit of the stomach, which was relieved by a morphine injection. In the course of the evening he remarked on the altered character of the pain, which was distinctly less severe. A second injection was given on August 17th, and a third two days later. The usual features of the gastric crisis disappeared during the week, the appetite began to return, and the sickness subsided.

In the course of the following week he was given three other injections of colloid selenium at intervals of two days, and the improvement was not only maintained, but became more marked. The patient recovered his spirits, confidence returned, and he enjoyed good sleep. He still suffered from his stomach now and then, and occasionally brought up his food, but the pain was vague and ill-defined, and the syndrome was no longer that of typical gastralgia. After a week's rest he had four more injections—this time intra-muscular, in the gluteal region, bringing us down to September 15th.

It will be noted that the selenium treatment, commenced on August 15th and comprising ten injections, had a most pronounced effect in relieving the gastric crisis associated with the existence of a neoplastic tumour of the stomach.

The selenium employed was the electrically prepared Selenium A colloid (André Lancien's process), of which 3 c.c. were injected each time. On some future occasion we shall make it our duty to record the ultimate result of the treatment in this case, which presents the greatest therapeutical interest.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Excision of Penis.—Mr. T. P. Legg operated on a farm labourer æt. 70, who had been admitted for an epithelioma of penis, which had destroyed the whole organ to within an inch of its base. The growth had been in existence some months and had produced, as is usual, very few symptoms. The ulcer was of the usual nodular type, with an indurated base and very little discharge. The glands in both groins were considerably enlarged, but not adherent to the surrounding tissues. There were no enlarged glands in the iliac fossæ. The general health of the patient was otherwise quite satisfactory.

The patient was anæsthetised and placed in the lithotomy position; a median incision in the perinæum was made down to the urethra, which was isolated and dissected back towards the base of the bladder. The urethra was then cut across in such a place that enough of the proximal portion was left to enable it to be brought down without traction to the cutaneous surface of the perinæum. The corpora cavernosa were next detached on both sides from their posterior attachments. The dissection of these structures was continued forwards until where they passed under the arch of the pubes and joined one another in the body of the penis. After all the bleeding in this perinæal wound had been arrested gauze packing was temporarily placed in it. An incision wide of the ulcerating growth was then made in the skin of the scrotum and in front of the root of the penis on the lower part of the abdominal wall; in the latter situation the incision was deepened until the sheath of the rectus and the suspensory ligaments of the penis were reached. In the scrotum the whole thickness of the skin and underlying tissues were divided until the corpora cavernosa were exposed. The suspensory ligaments and loose connective tissues around them were divided. The penis and growth were thus entirely separated and were removed by making traction towards the front of the patient's body. The oval-shaped area in the scrotum and the lower part of the abdominal wall was then closed by interrupted sutures; a large drainage tube being inserted at its lower part. It was necessary to do a certain amount of undercutting in the adjacent parts of the abdominal subcutaneous tissues in order to get the edges of the wound together. A somewhat irregular scar resulted. The gauze packing was removed from the perinæal wound and the edges united by interrupted silkworm gut sutures; a drainage tube being also placed in this wound. The divided end of the urethra was fixed to the margins of the incision, about an inch in front of the anus. Before inserting the sutures a lateral incision about half an inch long was made through the whole thickness of the urethral wall on each side, thus forming an upper and lower flap. Two or three sutures were used to unite each of these flaps to the skin. A soft rubber catheter was then passed into the bladder and fixed *in situ* by a stitch passed through it and the skin.

Mr. Legg said that the operation which he had just performed was the most satisfactory and the only one which could be advised when a growth extended as far back in the penis as in this man's case. The first point to consider is the possibility of eradicating the disease, and this operation is the best so far as recurrence in the penis itself is concerned; there is very little likelihood of this happening if the surgeon is able to get well behind the furthest limit of the growth in the organ. When the growth is less extensive it is often possible to amputate the penis in front of the scrotum and leave the patient with a stump which he can hold when he desires to micturate. The second point which is always to be considered is the future as regards micturition: it is never advisable to leave the patient with the opening of the urethra just in front of the symphysis pubis or close to the attachment of the scrotum; an opening in this region causes much discomfort, because at every micturition the patient is liable to wet the scrotum and have a good deal of eczema set up. A perinæal orifice for the urethra is not open to these objections: it is true a man cannot pass his water in the usual fashion, but the urine is projected downwards between his legs in a receptacle, which can be held there, or on which he can sit. It is not very uncommon for the patient to have some incontinence of urine for a little time after the operation, and after the catheter has been removed, which is generally done at the end of two or three days. But in a very short time the patient regains full control of his bladder. The catheter is put in at the time of the operation to prevent retention of urine. There may be a good deal of swelling about the new orifice of the urethra, and it is not always an easy thing to pass the catheter to draw off the urine under these circumstances. When all the inflammatory swelling has subsided it is easy to pass a catheter into the bladder. The urethra is split, as was done in the operation, to prevent contraction of the new orifice taking place and thereby preventing a stricture forming. If the new opening for the urethra is placed as far in front of the anus as was done in this patient the risk of infection of the urethra or the bladder from the anus and rectum is negligible.

Mr. Legg also pointed out that the operation he had just done differed from that described in text-books in one important respect, namely, that the scrotum was not split through its raphe between the testicles. This was a proceeding which he considered was never necessary, and the operation could always be carried out by making an incision round the base of the penis and deepening this cut until the two wounds were united across the base of the scrotum. Another important point was to do the perinæal part of the operation first, and, when the penis and the corpora cavernosa have been completely detached, to push the posterior portions into the anterior part of the wound and thereby avoid infection of the large wound in the perinæum. which would be likely to occur if the ulcerating and diseased part of the penis were removed by pushing it backwards into the perinæum. The operation was a severe one, chiefly from hæmorrhage; if care was not taken to arrest all bleeding as vessels were divided; if this was done the severity and risks of the operation were much diminished. The removal of the glands in the groin was postponed for a time, as this in itself involved a wide dissection on both sides, and because it was almost impossible with the ulcerating growth on the penis to prevent the wounds becoming infected. Moreover, after the removal of the penis in the manner he had employed had been completed the patient was not in the state to undergo further extensive operative procedures.

The patient made a good recovery.

TRANSACTIONS OF SOCIETIES.

LIVERPOOL MEDICAL INSTITUTION.

Meeting held Thursday, October 24th, 1912.

The Vice-President, Dr. C. J. Macalister, in the Chair.

Dr. A. J. Wallace read a note on four cases in which he had performed

HEBOSTEOTOMY.

Two cases were done by the open method six years ago and had not impressed him favourably, but two recent cases done by the subcutaneous method had given good results; a live child was secured in both cases, of seven pounds in one case, eight pounds in the other; the one mother recovered and left the hospital in 24 days, the other in 17 days. Dr. Wallace illustrated his note by lantern slides, showing the anatomy of the parts concerned, the *technique* of the operation and the results obtained. He thought the operation useful in the minor degrees of contraction where the passages were fully dilated and the child alive. On the Continent the operation had been performed indiscriminately and had had very bad results. Statistics were quoted from various authorities.

Dr. A. A. Bradburne read a note on

LACHRYMATION,

in which he gave a sketch of the nerve mechanism, and related cases where alteration in the secretion was due to general causes. He protested against the use of dilating probes in cases of overflow of tears.

Dr. G. A. Crace-Calvert read a paper on

INTRA-CRANIAL TUBERCULOSIS IN ADULTS.

The paper was based on seven cases, chiefly meningeal. The condition had occurred in males not over 50 years of age, and mostly between 30 and 45. It was always secondary to tuberculous disease elsewhere, especially in the lungs. It had been suggested that the condition was due to the use of tuberculin, but Dr. Calvert believed it had occurred most in cases where tuberculin had not been used. As one explanation of the preponderance of male over female cases, he suggested that men worried more over being ill and were more anxious and irritable than women. The symptoms of the disease were insidious and obscure, and a non-acute type of onset was common. Headache was the most common symptom. Fever was sometimes absent; vomiting was not common and was a late symptom. Constipation was marked, but was possibly due to opiates. Optic neuritis was absent in four out of the seven cases. Kernig's sign was not always present. The pulse was in some cases quick and irregular, but in other cases slow and of high tension. The respiration, slow and shallow to begin with, might become of the Cheyne-Stokes type. In some cases there was retraction of the head. Coma might occur for several days; the patient apparently got well for a time, the coma coming on again, and being fatal even after a month's intermission of symptoms. Diagnosis depended on the severe persistent headache in a subject showing evidence of tuberculosis, especially when accompanied by optic neuritis, Kernig's sign, and mental derangements. Lumbar puncture showed increased quantity of secretion, turbid or clear, an excess of lymphocytes, and in 80 per cent. tubercle bacilli were found. The result was invariably fatal in adults in from nine days to seven weeks. The treatment was symptomatic, morphia being found to give most relief to the intense pain. Lumbar puncture gave temporary relief. The local reaction following tuberculin produced more pain; so far no good results had followed.

In the discussion that followed **Dr. C. J. Macalister** said he had seen relief from the use of wet cupping over the parietal protuberances, and in children recovery after the use of mercurial inunction.

Dr. W. Permewan questioned the justifiability of the use of tuberculin, as it seemed to him that intracranial tuberculosis was so frequent where that remedy had been used.

Dr. J. Hill Abram thought lumbar puncture was not needed for diagnosis, and he disapproved of its use if a general anæsthetic were required, as the psychical disturbance had a bad effect on the patient, and the method frequently gave no positive result. He quoted a case of intra-cranial tuberculosis that had apparently been cured by tuberculin.

Dr. Lloyd Roberts spoke of temporary aphasia as an early symptom in these conditions; he had seen three cases.

Dr. R. J. M. Buchanan described the method of using tuberculin at the Kennington Dispensary, where the lobing of leucocytes was taken as the indication for the dosage.

Dr. Percy Marsh had found among children that lumbar puncture gave no result, the relief of symptoms being only very transitory. Tuberculin had proved of no use.

Dr. T. R. Glynn, Dr. W. B. Warrington, Dr. W. D. Wilkins, Dr. Fairford Thomas, Dr. C. Rundle, also took part in the discussion, and Dr. Crace-Calvert replied.

HARVEIAN SOCIETY OF LONDON.

Clinical Meeting held at the Hospital for Epilepsy and Paralysis, Maida Vale, W., on Thursday, October 17th, 1912.

The President in the Chair.

The following cases were shown :—

Dr. Leonard Guthrie : (1) Primary lateral sclerosis. (2) Residual chorea.

Dr Maurice Squire : (1) Carcinoma of Breast, treated by X-rays. (2) Keratodermia Blennorrhagica.

Dr. S. L. Hay (for Dr. Wilfrid Harris) : (1) Notes on a case of Spinal Tumour. (2) A case of Glossal Tic.

Dr. G. de B. Turtle (for Dr. Graham Little) : (1) Erythema Multiforme in a boy. (2) Frambœsioid Syphilide in a man.

The cases were discussed by Dr. Guthrie, Dr. Langmead, Dr. Turtle, Dr. Maurice Squire, Mr. Bourne, Dr. Travers Smith, Dr. Hay, and the President.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Oct. 26th, 1912.

Citrate of Soda in Gastric Pain.

Gastric pain after eating is so frequent that the therapeutic remedies prescribed against it are beyond enumeration. Attributed to hyperacidity, it was generally treated by alkalines, chalk, magnesia, and especially bicarbonate of soda. But if these alkalines relieved the pain they stimulated at the same time the secretion of the hyper-acid gastric juices. According to Dr. Hayem, an authority on gastric affections, certain patients who had prolonged the use of bicarbonate of soda found in the end that it had no longer any effect on their suffering. Citrate of soda, employed for the first time in England by Dr. Wright, was recently introduced into France and prescribed with great success in gastric intolerance of children.

Dr. Lacheny, who made it the subject of his thesis, describes how citrate of soda relieves gastric suffering coming on three or four hours after meals. In all the cases he observed the salt promptly relieved the pain, while it had a remarkable curative effect on the morning vomiting of habitual drinkers. The efficient dose is from half to one drachm. As to its mode of action, Dr. Lacheny concluded that the salt combining with the free acid was resolved into citric acid and chloride of sodium, and that the sedative action was due to the soda. The solution of citrate of soda should be freshly made, as it loses its properties after a few days.

Treatment of Psoriasis.

The diagnosis of psoriasis is easy : its slow evolution, its dissemination, its predominance on the surface of extension of the limbs (knees, elbows), its aspect, removing all doubt.

The characteristic signs of the eruption are known to all.

The treatment is long and requires great patience and perseverance on the part of the patient, otherwise the affection returns rapidly.

Arsenic, says Prof. Gougerot, should form the basis of the treatment either in the form of arrhenal or Fowler's solution :—

Arrhenal, 15 grs.
Water, 4 oz.

A teaspoonful at the midday meal and continued 20 days; after a suspension of 10 days it is repeated, and so on every month.

As Gaucher has shown that there is a great loss of chlorides during the course of the malady, remineralisation is necessary :—

Carbonate of lime, 6 gr.
Phosphate of lime, 10 gr.
Cal. magnesia, 2 gr.
Chloride of sodium, 2 gr.
For one powder ; two daily, after meals.

Digestion should be facilitated by taking a large glass of the following solution before meals :—

Bicarb. of soda, 2 drs.
Phosphate of soda, 1 dr.
Sulphate of soda, ½ dr.
Water, 1 quart.

The local treatment recommended by Prof. Gougerot consists essentially in the application of cade oil :—

Oil of cade, 4 oz.
Black soap, q.s.
Oxide of zinc, 4 oz.
Olive oil, q.s.

The whole body is coated with this paste on going to bed, the patient wearing a flannel shirt and tight drawers, which should be kept on during the whole period of treatment.

In the morning this paste is removed with vaseline and then by soap; a bath is taken immediately after, either with cade oil bath or, if not possible, an alkaline bath.

Oil of cade, 4 oz.
Black soap, 4 oz.

to be poured into the bath.

If the patient has to go out in the day no ointment is put on, but if he can keep indoors the paste may be used.

For the head, neck and face the ointment of Prof. Gaucher should be substituted for the paste :—

Sulphur, 15 gr.
Salicylic acid, 15 gr.
Camphor, 15 gr.
Oil of cade, 3 dr.
Oxide of zinc, 5 dr.
Vaseline, 8 drs.

The treatment should be carried out under the control of the medical attendant, who should be careful to look for symptoms of irritation of the skin due to the oil of cade.

As soon as the lesions are found to be improving and that the isolated patches have disappeared, a less anæsthetic treatment may be applied.

GERMANY.

Berlin, Oct. 26th, 1912.

At the Naturforscher-Versammlung-Department for Surgery, Hr. Vorschutz, Cöln-Lindenberg, gave an address on [illegible]

The Importance of the Alkalis in the Treatment of Septic Diseases.

In the fight against inflammation the blood furnished the most important factor in the strife. This factor, according to Buchner, was dependent on the salts in the blood, as with a diminished alkalescence the bactericide property of the blood diminished also. According to recent inquiries the alkalescence of the blood was diminished in all infective diseases. Now, proceeding from this standpoint, as much as four years ago, patients suffering from serious infective diseases and inflammations had been treated with a copious supply of alkalis in the form of Na_2CO_3 in doses of from 20 to 25 gm. for adults and 10 gm. for children. The administration was best effected in artificial carbonic acid water, or per rectum, as in the large intestine 75 per cent. of the alkali was absorbed. The striking part was that in all the patients, in spite of the worst possible general condition there was at once a feeling of well-being and the mental faculties did not become clouded, they retained consciousness. Patients in whom the prognosis was most unfavourable recovered. In the consideration of these cases we were thrown on to our clinical experiences, which under certain conditions were as valuable as theory and experiment. The speaker had attempted to show by experiment that the administration of the alkali exercised a certain influence on the infective process. He would like to show that the body with acidulated blood was not in as good a position to un-poison the system as normal alkaline blood. The experiments were made with ricin. Experiments had shown that 0.1 gm. pro kilo of body weight was an absolutely fatal dose for rabbits. The blood was made acid by 1/10 normal hydrochloric acid solution, of which 50 c.cm. were injected into the jugular vein. The rabbits which averaged a weight of 2 to 2½ kg. bore this without the least effect being traceable. When these animals were given ricin in doses that were not otherwise fatal, after a time they died, the acidified blood was not capable as normal blood was of unpoisoning, when equal doses of toxin were given. If this view was correct, animals that were given a similar dose of ricin and hydrochloric acid should remain alive when the acid was neutralised by a corresponding dose of alkali. This neutralisation was effected by injecting, also into the jugular vein, 50 c.cm of a 1/10 normal solution of soda. The technical difficulties here were very great and in only one case could any definite result be obtained. The experiments, however, supported the assumption that the poisoning was dependent on diminished alkalescence. As regarded the action one might assume that the alkalies within the body took on the *rôle* of catalysators, by virtue of which the individual cells were in a position to form protective ferments.

On the basis, therefore, of clinical and experimental experiences the speaker would recommend that in severe forms of inflammation the administration of alkalies should be carried out from the commencement. In chronic suppurations also, which frequently show the typical appearance of " drying up ," the use was commendable.

Hr. Kausch, Berlin, asked if the course in several severe cases was typical and particularly whether the curve of the excretion of albumen was always the same as in the case of scarlatina sepsis shown, whether in the experiments on animals an acid poisoning did not play a part ?

Hr. Vorschütz said that a number of severe cases of the most diverse kinds had recovered. The possibility of acid poisoning was excluded by preliminary experiments.

Hr. Tilmann, Cöln, pointed out again the striking subjective well-being of patients in the severest diseases, and more than all he had never seen the slightest harm from giving the alkalis.

New Roentgen Institute.

On the 7th inst. a new Roentgen Institute was opened in Berlin which had been recenty erected by the Central Committee of the Krankenkassen Berlins and suburbs. It stands near the Hydrotherapeutical Institute erected a few years ago by the same authority, where the attendance amounts to about 200 patients a day. Both establishments are under the direction of Dr. O. Keiserling and Dr. Kapferer. The Institution was erected by a Münich firm at a cost of 10,000 M. It is fitted with the newest and most approved forms of apparatus, and is intended to be employed for all the different divisions of service in which the X-rays find employment.

AUSTRIA.

Vienna, Oct. 26th, 1912.

Poliomyelitis.

Starke, in his clinical lecture, commenced with a history of the disease as an inflammation of the grey matter in the anterior horns of the spinal cord that led to muscular paralysis, atrophy, loss of reflex, associated with degenerative reaction. It was first recognised as a child's disease, a child being more sensitive to spinal disease. In 1840 Heine first described the disease, although Underwood described the same symptoms under the title of dentition paralysis, but Heine first defined the site of lesion. Clinical testimony was next forthcoming by Duchenne's electrodiagnosis, which Cornil confirmed by pathological anatomy in finding the horn smaller and the ganglionic cells wanting in the anterior horns, which Clarke subsequently confirmed. Charcot next endeavoured to discover the cause of this change, and decided that it was an inflammatory condition of the ganglionic cells which, with subsequent atrophy, was the initial order of the disease. He designated the morbid process as "parenchymatose inflammation of the grey substance of the cord." Kussmaul, with many others, confirmed the histological findings with changes in the vascular supply and cell infiltration in the walls of the vessels.

In 1883 Archambault and Damuchina controverted Charcot's opinion of origin in the ganglionic cells, and affirmed that it was due to an interstitial myelitis. Up to this time it was recognised as a child's disease, but Meyer met with the disease in two young men, 18 years of age, after an attack of measles, which encouraged him to affirm that adults, after exanthematous fever, were subject to the same disease.

Duchenne looked upon the pathology as a nerve disease. He met with four cases with all the phenomena of children's spinal disease, which he described as *spinale antérieure aigue de l'adulte,* and a sub-division which he termed *sub-aigue,* the latter being a sub-acute form or chronic, as their course ran on for weeks or months before the paralysis of the extremities took place and the atrophy of the muscles showing the degenerative phenomena.

The following is a picture of the disease, commencing without any severe phenomena and apparently without any cause. A healthy man observes one of his arms or legs becoming weak, the weakness increasing day by day for a few weeks, till it becomes so troublesome that he cannot make use of the affected extremity. The weakness may then extend to another arm or leg, affecting the hip, neck, or muscles of the face. The paralysis will always be observed to have an elective character, affecting muscular groups, which the patient observes to become smaller by atrophy and having a degenerative reaction.

The sensibility is still maintained with fibrillary contractions in the muscles. The skin and tendon reflex are lowered, bladder and bowel are intact, and if long continued it may became chronic, or stationary for a time and afterwards recover, the atrophy even disappearing ; but, as a rule, they generally succumb from dyspnœa or bulbar phenomena. These cases often run on for years before pneumonia, asphyxia, or some inter-current disease produces death. The prognosis in all cases is bad. The differential diagnosis in poliomyelitis will be found in spinal progressive muscular atrophy, gliosis, polyneuritis, and amyotrophic lateral sclerosis. In spinal progressive atrophy one muscle escapes while another is attacked, but in poliomyelitis the whole group is affected. In the spinal the muscular atrophy is confined to the small muscles of the hand—as a rule, where it commences. In gliosis it differs from poliomyelitis, while the loss of sensibility in the former and the trophic and vaso-motor disturbance remained intact. In polyneuritis we have again the sensibility to guide us and the pain on pressure of the nerve. Against amyotrophic lateral sclerosis are the spastic symptoms, which are not present in poliomyelitis.

It may be mentioned that the ætiology is obscure ; no toxin can be blamed, and hereditary taint seems to have no part in the disease. It may occur at all ages and conditions of life.

UNITED STATES OF AMERICA.

Washington, Oct. 12th, 1912.

The International Congress on Hygiene and Demography.

The most distinctive feature of the congress was the fact that President Taft took a keen and personal interest in the proceedings. In opening the first general session Mr. Taft made a remarkably eloquent and practical speech, in which he showed that he fully recognised the supreme importance of public health. He advocated in vigorous language the establishment of a national health department, and further made the eminently reasonable suggestion that the splendid U. S. Public Health and Marine Hospital Service should be so amplified in powers and *personnel* that it might become a national department. Of course, very powerful interests are arrayed against the creation of a national health department, the quack medicine concerns being the most prominent in antagonising any such innovation. These businesses are said to be spending money freely in order to block the scheme and are mainly responsible for the cry which is being raised that a national health department would be no more nor less than a doctors' trust. Naturally, they recognise the significance of the "writing on the wall," for if a national department came into being their potentialities for evil would be greatly curbed.

The congress was so immense and the subjects treated so numerous that it would be impossible within the scope of two or three reports to deal with all the matters referred to. Therefore, the object here will be to consider briefly a few of the most important sections. On the whole, when the situation of the civilised world at the present time is taken into consideration it may be said that

Diseases of Occupation

bulk more largely than any other aspect of public health. The world is given over to materialism and industrialism, with the consequences that people are flocking to towns and living generally under conditions that are not conducive to good health or to the upbringing of a strong and vigorous race. There appears to be no means of checking this continuous and progressive movement of the population to crowded centres, for it is as evident and is arousing as much alarm among far-seeing persons in the new as in the old world. Most recent statistics show that the trend of population in the United States and in Canada is to the cities, and this tendency is even more evident in Canada than in the United States. Stress was laid on this phase of the situation in the paper read by prominent public health authorities of Canada at the recent meeting of the Canadian Public Health Association held in Toronto (reported in your columns), and sanitarians of the United States are quite as apprehensive of the effects of this herding together in cities, and as eager to devise measures whereby the evil may be successfully grappled with as are their neighbours of the Dominion.

Back to the land would appear to be an excellent solution of the problem, but the difficulty is that the vast majority of city dwellers do not want to go back to the land. Those who were born and brought up in cities are not fitted by physique, habits or tastes for life on the land, while those who have lived on the land, as a rule, find city life more attractive. Until means are thought out of rendering agricultural life more profitable and agreeable it is to be feared that the trend of population will continue in the direction of towns, and the only thing that can be done is to make city life as healthy as possible.

The first steps to be taken to bring about this end are to cause the industrial trades, both in factories and in homes, to be carefully supervised. In the section on diseases of occupation at the congress many papers were read by leading health authorities of the world in which the various aspects of the subject were considered. A very important point in connection with industrial work is the effect upon infant mortality of the employment of mothers in factories. This question is perhaps more serious and acute in Great Britain than in any country, and, therefore, it was in the proper order of things that the best paper was read by an Englishman, Dr. George Reid, D.P.H., Medical Officer of Health for Staffordshire. Dr. Reid whose experience of the conditions of labour in the pottery district warrants him in speaking authoritatively, is strongly of the opinion that the employment of mothers in factories has a distinctly injurious effect upon infant mortality. He cites the situation in Staffordshire in support of this argument. In Staffordshire there are large artisan populations, all equally favourably situated as regards domestic circumstances, and not differing in their hygienic surroundings, but presenting a wide difference in the facilities afforded for the employment of women in factories and works. These two groups are the pottery towns, where a large number of married women are so employed, and the towns where the male workers are engaged in ironworks and collieries, while the mothers only engage in domestic work, the trades carried on not affording an opening for the general employment of women. As a fact, the mean infantile mortality in the case of the former group of towns exceeds that of the latter by 28 per cent., the records on which the calculation is made covering a period of thirty years.

An American authority, Mr. Chas H. Verrill, Bureau of Labour, Department of Commerce and Labour, Washington, D.C., arrived at different conclusions, for, although he found that the high infant mortality at Fall River, Massachusetts, a factory town, where women are largely employed, was due to improper feeding, he also found that the death-rate of infants whose mothers lived at home was almost as high as that of infants whose mothers went out to work. However, the consensus of opinion is that the employment of mothers discourages or renders impossible breast feeding, thus bringing about a high infantile mortality.

A question touched upon in this section and a question which intimately concerns all sorts and conditions of men, in all large cities, was that of unnecessary noise. No one can deny that the noises which go on by day and by night in cities are nerve-racking and harmful, and all will agree that it would be in the best interests of public health if steps were taken to do away with a good deal of such noises. Dr. Clarence John Blake, Professor of Otology, Harvard Medical School, read a paper on the subject, in which he pointed out that the deleterious effect of unnecessary noise was evidenced in the changes occurring in the organ of hearing as the result of continued exposure to loud noise, but also in the fatigue effect showing itself generally and evidenced by various forms of disturbance of function of the nervous system. A great part of the noise incidental to the mechanical operation of modern life, especially in crowded centres, is avoidable. Consequently, Professor Blake argues, the suppression of unnecessary noise is advisable for economic reasons, both in the safeguarding of the human machine and in the saving of wasted mechanical energy, of which the noise is an evidence, a saving of waste in two directions. A society has been formed in America for the suppression of unnecessary noise. There is need for one perhaps in England.

Prof. Dr. L. v. Frankl-Hochwart, K.K. Universität, Vienna, read a paper on the occupation neuroses, by which is meant a disturbance of the muscular innervation, which only sets in after complicated activity of the muscles acquired by practice while the muscles in every other action obey the will. As ætiological factors, one must consider the nervous heredity, the neuropathic diathesis, insufficient alimentation, alcoholism and nicotinism. Professional overwork is one of the main factors; depressing conditions of life and the effects of fright are also predisposing factors. The symptomatology is best observed in the most frequent and most important neurosis—in writers' cramp. One must differentiate between four points—(1) the spastic, (2) the paralytic, (3) the tremor-like, and (4) the neuralgic. Prognosis is not absolutely bad, but always doubtful.

Several papers were read on caisson disease, and all the authors seemed to be agreed that slow decompression, with a rapidity accelerated in the beginning, as proposed by Haldane, is preferable to a uniform decrease of pressure as a prophylactic measure.

Sir Thomas Oliver, University of Durham College of Medicine, Newcastle, gave an address on the evening of September 23rd, on "Dust and Fume: Foes of Industrial Life." Commencing his address with a practical illustration of the effect of dust by declaring that since the advent of the motor car and macadam roads in England, the foliage was disappearing from trees bordering on highways, the bullfinches and other song birds had been killed, and even the fish had forsaken streams which ran near such highways, Sir Thomas took up the subject of coal mines and dust explosions. He told of experiments made by him, which he said had convinced him that explosions in coal mines are largely due to coal dust. Explosion of coal dust is due to its absorption of oxygen, and Sir Thomas stated that he and his colleagues had treated some of the dust with a chemical fluid, and found that thus treated it was practically non-absorbent.

On the evening of September 24th, Dr. Jacques Bertillon, Chief of the Bureau of Municipal Statistics, Paris, gave an address on the mortality and causes of death by professions. The fact was very clearly brought out in papers read that the United States is far behind Europe in so far as legislative protection of the workman is concerned. Indeed, in only one State—that of Massachusetts—are there really adequate laws in this direction. With regard to home work there is also much room for improvement in the United States, and especially in New York. No city of the world is so overcrowded as is New York, and home work is largely and frequently carried on under conditions of overcrowding and insanitation most injuriously prejudicial to good health.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Edinburgh University General Council.

At the statutory half-yearly meeting of the council held on the 26th October, a strong protest was made against the action of the Treasury in attempting to compel the Scottish universities to institute an inclusive fee. On the motion of Mr. J. B. Clark, the minute of the Conference of the Councils of the Scottish Universities (referred to in this column a fortnight ago) was transmitted to the university court, and then Principal Laurie moved, "That the General Council of the University of Edinburgh is of opinion that, in seeking to impose the institution of an inclusive fee as a condition of the payment of Parliamentary grants, the Treasury is interfering unwarrantably with the freedom of the Scottish universities, and that the Business Committee be authorised to take such steps as they may deem advisable in respect of this matter." The motion was a protest, not against the principle of an inclusive fee, but against the Treasury forcing it on the universities whether they wished it or not. Freedom from State control was as important as freedom of the churches. St. Andrews had accepted an inclusive fee for medicine which might be far too small for Edinburgh, and by doing that they were forcing the hands of the other universities, as the inclusive fee was to be uniform. The situation was most unfair to Edinburgh, and had arisen because the universities did not take a stand on sound constitutional principles. Mr. J. Miller Thomson seconded. Principal Morgan pointed out that there were other reasons, apart from the inclusive fee, for protesting against the Treasury's interference, and thought that further experience of the inclusive fee was necessary before fixing the fee for medicine and applied science. Ultimately Principal Laurie's motion, slightly amended, became the unanimous finding of the meeting. At the same meeting the draft ordinance for the founding of a chair of Bacteriology under the provisions of the will of the late Mr. Robert Irvine, who bequeathed £30,000 for the purpose, was approved. The free income of £25,000 will be paid to the professor as salary, and the free income of £5,000 will be applied towards equipment.

Ophthalmia Neonatorum.

A circular by Dr. Thomas F. Dewar on the incidence of ophthalmia neonatorum in Scotland has been issued by the Local Government Board. The disease, if not treated promptly, causes blindness, and accordingly it is satisfactory that the local authorities can require notification of cases to the medical officer of health under the provisions of the Infectious Diseases (Notification) Act. So far, only a few Scottish authorities have adopted this course, although in England many have done so. Where the notification of Births Act has been adopted a notice warning parents of the dangerous character of the disease is sent to parents by post, or through the health visitor. The local authority of Glasgow has made the disease notifiable for a period of three years from August, 1911. In a preliminary investigation Dr. Chalmers learned that about 200 cases occurred annually, and found that while some cases required institutional treatment, in most cases outdoor treatment was sufficient. He advised the local authority to appoint two nurses to do the work that would arise in connection with the notification. From Dr. Dewar's inquiries in twenty of the largest towns in Scotland, it would seem that ophthalmia neonatorum is diminishing in frequency, and that cases of the disease resulting in blindness are much less numerous than they were twenty or thirty years ago. In Edinburgh the incidence of the disease is low, because only a small proportion of the confinements in the city are attended by midwives.

The Increased Remuneration Under the Insurance Act.

So far as can be gathered from inquiries among medical men in Edinburgh the general feeling is, that although the concessions made by the Chancellor were as much as, if not more than, was expected, they do not very materially alter the situation. The new offer must be read along with the other conditions of service, which are in many respects eminently unsatisfactory. Doubt is freely expressed as to whether 1s. 6d. can possibly cover the cost of medicine and appliances. Exception is also taken to the allocation of 6d. from the sanatorium benefit for paying the general practitioner for all tuberculosis work. It practically cuts down to a very small figure for work which is difficult, and which ought to be paid by attendance. It is estimated that there will be 1,300,000 insured persons in Scotland. At 9s. this would give a sum of £585,000 for medical benefits of all kinds to insured persons, and on a 7s. basis it would provide a fund of £455,000 for distribution yearly among 2,500 medical practitioners, or £190—£200 for each. It has not yet, however, been estimated how many doctors will actually be required to work the Act. Speaking generally, it is believed that over a very large part of Scotland, with the exception of one or two areas in the South-West, which are not so strong in their opposition, the medical profession will stand to the terms they have demanded, and, while admitting that the concessions made by the Chancellor may afford a basis for reopening negotiations, they will refuse to work the Act even under the new conditions. The suggestion that as a condition of receiving the increased remuneration medical men should be compelled to keep records of their cases is viewed with great distrust, but the vagueness of the statement concerning these reports makes it difficult to express a decided opinion as to the feasibility of the proceeding.

BELFAST.

Hospitals Staffs and the Insurance Act

A meeting of the medical staffs of the Royal Victoria Hospital, the Mater Infirmorum Hospital and the Forster Green Hospital for Consumption, was held in the Medical Institute, Belfast, on Thursday, October 24th, to consider the attitude which should be adopted by the staffs towards some of the questions affecting the hospitals under the Insurance Act. The chair was occupied by Sir William Whitla, M.D., the senior physician to the Royal Victoria Hospital. The special points discussed were those relating to the advice to be given to the hospital authorities as to the admission of tuberculosis patients under the Act, and as to the payment or otherwise of the medical staffs for attendance on such patients. Sir John Byers urged that in view of probable developments, such as the extension of medical benefits to Ireland, it was premature to come to any decision on these points at present, and this view obtained a good deal of support. On the subject of payment, the general feeling was that to accept payment for attendance on these cases would place the members of the staffs in undesirable competition with the general practitioner outside, and might lead to many complications. It was recognised that on this point the position of the staff of a special tuberculosis hospital, perhaps nearly filled with insurance cases, and not a teaching institution, might be different from the position of the general hospitals, but the staff of the Forster Green Hospital decided to throw in their lot with the others in all respects. After prolonged discussion a resolution proposed by Mr. R. J. Johnstone was agreed to. This was to the effect that in view of the present uncertainty and possible changes in the working of the Act in Ireland, the boards of the various hospitals be advised to admit cases of Tuberculosis on such terms as they may arrange with the Insurance Act authorities, subject to two conditions:—that the cases shall be recommended by their own medical attendants, and that they shall be passed by the staff as suitable for hospital treatment; further, that the staffs remain honorary, as at present; and lastly, that these decisions shall remain in force till July 15th, 1913, when they shall be brought up for revision. It was thought by some members that it would be better to set a shorter time limit, lest matters should settle down and precedents be formed from which it might be difficult to escape, but the majority thought that next July would be soon enough to reopen the discussion, and that before then we should hardly know how we stood in relation to the working of the Act. It was only in relation to tuberculosis cases that the working of the hospitals was considered at length, but there is no doubt that the whole working of these and also of the various special hospitals, and also the important question of certificates will have to be discussed later.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE WOUNDED AND SICK IN WAR.

To the Editor of The Medical Press and Circular.

Sir,—If I have any qualification to write on the subject dealt with editorially in your current issue, it is due to the fact that I have witnessed war being waged on as big a scale as the conflict now beginning in the Balkans, and have been able to realise the literally appalling character of the misery and suffering it entails, even when great, albeit insufficient, efforts have been made to provide aid for the wounded and sick. With my late friend, Mr. A. T. Norton, whose death we have recently had so deeply to deplore, I was among the first to volunteer for service under the newly founded Red Cross Society in the Franco-German War of 1870. Mr. Norton was then one of the surgeons of St. Mary's Hospital, Paddington. He was appointed head of an ambulance with me as his second and a small staff of student dressers. With us went to help in our organisation Mr., now, Sir J. Furley. In Luxembourg on the frontier we engaged waggons for ourselves and our stores, and set off for the battle-fields around Metz. We made our headquarters at Briey, a few miles from the scene of the biggest battle of the war—Gravelotte—fought on August 18th. On August 14th a big battle had taken place to the east of Metz, and on the 16th a whole day's fighting at Mars-la-Tour, and many big and little skirmishes had been fought throughout all these days. I cannot find my record of the approximate numbers of wounded, but at St. Privat on the afternoon of August 18th (Gravelotte) the Prussian Guard alone lost nearly 11,000 officers and men in killed and wounded. There were, at any rate, many thousands of wounded scattered all over the countryside, and these were for the greater part the more serious cases. It is wonderful what wounded men will do in the face of starvation if they possess the power of locomotion, and those that were able to walk, and some that were fit to travel a few miles in waggons, found their way to the railway beyond Metz and were carried to base hospitals in Germany.

It was impossible to bring to the spot an ambulance service equal to such an emergency. The German service was far from adequate; the French, like all their arrangements in this war, was lacking in every essential requirement. The days of antiseptic surgery had not begun. Listerism and the value of carbolic acid as an antiseptic were being recognised in England, but were practically ignored both by the German and French surgeons. The conditions were very similar to those likely to prevail in the Balkans, for although aseptic surgery will be practised on both sides when possible, there has been very little preparation for the immediate antiseptic dressing of the wounded on the battle-fields among any of the combatants. Most of the wounds will be septic. Where the cover of a roof is to be found, the men will be packed on the floors of the peasants' huts without beds (or bed-pans!) or cover against the cold. Hospital gangrene and septicæmia will prevail, and a huge mortality will ensue among cases that might, under more favourable circumstances, have been saved. This is what happened around Metz in 1870, in civilised France; the conditions must be much more difficult in the poverty-stricken and semi-barbarous regions in which the armies are now operating. I should be sorry to depreciate the value of the work in mitigating human anguish which may be achieved by the Red Cross ambulances sent out by neutral Powers; but it must be hardly more than is a drop in the ocean. It is, of course, the duty of nations waging war to provide ample medical service; and that this can be done was proved by the Japanese in their war with Russia. In spite of the conditions which were, at least, as unfavourable as those in the present conflict, the Japanese wounded were all so wonderfully looked after that the mortality was less than had ever before been known. When neutral nations intervene, as in the present case, it, more or less, relieves the defaulting Powers from a burden they ought to sustain, sets free more fighting forces, and tends to prolong the war and extend its operations. On these grounds alone it has been argued, with reason, that neutral ambulances should be forbidden. But these considerations are not likely to weigh with philanthropists, including doctors, whose strongest impulse is to relieve human misery whenever and wherever they can get into relation with it.

I am, Sir, yours truly,
Henry Sewill.

The Old Rosery,
Earlswood Common, Surrey.
October 25th.

THE POSITION OF DENTISTRY.

To the Editor of The Medical Press and Circular.

Sir,—One unexpected result of the failure of the Dentists Act is now showing itself. You will see by the enclosed report, published this week, of the London County Council Education Committee, to what a prodigious extent tooth decay prevails among the school children. The number urgently in need of dental help runs, in some districts, as high as 80 per cent., and does not fall anywhere below 66 per cent. The same proportion is found all over the country. It is quite as bad in my district, which, as you will see by my card enclosed, is a small town of a "residential" character within 50 miles of London. We have started a dental clinic, and know something about the question. If every qualified dentist in the country were to give a share of his time to the work it would be impossible to deal effectually with the mass of disease. I have tried to do my share in our local clinic, but found my health would not stand it; and this must be the case with many like me. Dental work does not put a strain on the nervous system quite as severe in some respects as that borne by the surgeon who is constantly dealing with issues of life and death; but the dentist's task is as a whole hardly less trying, and nowhere more so than in work in the mouths of young children of the class in primary schools. Two or three hours in stopping work of this kind is enough to exhaust the strength of the most robust practitioner, who all the time is besides obliged to inhale the foul breath of the patients. We all of us are earning hard livings competing with the quacks who make no private or public sacrifice for their patients, and we cannot be expected to do the work asked of us at the cost of health, strength and income. If the profession had, from the passing of the Dentists Act, been properly protected, there might by this time have been drawn into dentistry an adequate supply of qualified men, and among the juniors enough might have been found to carry on the work of school clinics all over the country. It would be, perhaps, amusing, if not valuable, to hear from "An Interested Observer," whether his clients, the "ethical," *albeit*, unqualified practitioners, whom he defends, are competent and willing to take a share in this work. How many of them are capable of making a correct diagnosis of the simple but varying conditions of disease presented in young children's teeth; how many of them can distinguish between sensitive dentine, for example, and exposed pulp; and how many of them are capable of performing the delicate operations called for in saving teeth of the second dentition so often carious between the ages of 6 and 12? He will find that many of his friends cannot distinguish temporary from permanent teeth at the ages named; he will find that they have no knowledge of necessary science, he will find that they have had no clinical instruction or experience with respect to children's teeth; he will find that they are mostly "out to make money" in the easiest way, that is by supplying badly made artificial teeth without, as other correspondents have pointed out, any regard for surgical conditions, which any qualified man, not being a rascal, would feel compelled first of all to take in hand.

I am, Sir, yours truly,
Country Dentist No. 3.
October 26th, 1912.

THE MOTOR DANGER.

To the Editor of The Medical Press and Circular.

Sir,—The present condition of the motor traffic is a disgrace to civilisation. Apart from the direct danger, it is impossible to use the King's highways without the nerves being irritated by the shrieks, hoots and whistles of motors, and the eyes, throat and lungs penetrated with microbe-laden dust. People who are ill suffer acutely—there is absolutely no quietness obtainable by night or day. If it were not that English people are traditionally law-abiding, the remedy would have been taken into their own hands long ago.

I am, Sir, yours truly,
A Sufferer.
October 26th, 1912.

OBITUARY.

DR. W. T. COCKING, OF SHEFFIELD.

We regret to announce the death of Dr. William Tusting Cocking, Emeritus Professor of Materia Medica and Therapeutics in the University of Sheffield, which took place on the 19th inst., at his residence in Ranmoor Crescent, at the age of 50. The deceased, who was educated at Wesley College, Sheffield, and University College, London, qualified as M.R.C.S.Eng., in 1884, becoming M.B.Lond., in 1885, and taking the M.D. (qualifying for gold medal) in 1887. His subsequent appointments included those of house physician, senior obstetric assistant and house surgeon at University College Hospital, and resident clinical assistant at Brompton Consumption Hospital. Dr. Cocking had also a long and honoured connection with Sheffield University. He was a past president and dean of the medical faculty, and professor of Materia Medica and of Therapeutics for fourteen years, and on resigning his staff appointment a year ago on account of ill-health, the honour was conferred upon him of being elected Emeritus Professor.

Prior to his University appointment the late doctor was associated with the old Sheffield School of Medicine, for a number of years filling the office of honorary secretary. In 1896, when the title of his office was altered to that of "Dean of the Medical Faculty" his colleagues on the council and teaching staff presented him with an address and library desk as tokens of their warm appreciation of his services. His connection with the medical school continued after the amalgamation of that institution with the University College, and was, of course, carried on to the University. He was the representative of the University on the General Medical Council—one of the most distinguished positions to which his professional colleagues could elect him, and he was also hon. secretary of the Sheffield Medico-Chirurgical Society from 1899 to 1905, when he was elected to the presidency of that society. Although his University and Royal Infirmary appointments occupied much of his time, Dr. Cocking had also a considerable private practice in Sheffield till increasing ill-health necessitated a curtailment of his activities. He gave a good deal of attention to the study of miners' nystagmus and his contributions to the medical Press included one on this subject and others dealing with "Case of Myxœdema Treated with Thyroid," and "Case of Ossification of Muscle Associated with Locomotor Ataxy."

Dr. Cocking married Miss Alice Mary Birks, daughter of the late Mr. Edward Birks, of Sheffield, in 1899, and he also leaves a son and daughter.

DEPUTY-SURGEON-GENERAL J. F. CORBYN.

The death took place, at Cheltenham, on October 24th, of Deputy-Surgeon-General Joseph Frederick Corbyn, aged 82. He was the son of a surgeon-general, and was born in India. After being educated in this country, he graduated in medicine at Edinburgh, and joined the Bengal medical branch of the East India Company's service, in which he remained 28 years. Within four years of his return to India he was attached to the 3rd Sikh Cavalry, and with them went through the Mutiny campaign, taking part in every action in which they were engaged, including the siege and capture of Delhi, the capture of Lucknow, and several other arduous operations. In addition to his medical duties, he was often employed as a combatant officer, and was selected for reconnaissance work on account of his skill in languages. He was wounded more than once, and was several times mentioned in despatches, and thanked by Sir John Lawrence, Governor of the Punjab.

DR. F. M. POPE, OF LEICESTER.

It is with deep regret that we have to record the death of Dr. Frank Montague Pope, of 4 Prebend Street, Leicester, which took place on October 26th, at the age of 56. The deceased, who was the son of the late Mr. Thomas Pope, of Harewoods, Bletchingley, qualified as M.R.C.S. in 1879, becoming M.D. Cantab. in 1901. He was Senior Physician to the Leicester Royal Infirmary for many years, and was Consulting Physician to the Leicester and Rutland Counties Lunatic Asylum and Consulting Medical Officer to the Leicester Institute for Trained Nurses. He was elected F.R.C.P.Lond. in 1902. Dr. Pope served in the South African War and received the medal, and was a Lieutenant-Colonel of the Royal Army Medical Corps, and Chief Surgeon to the St. John Ambulance Brigade. He was an Honorary Associate of the Order of St. John of Jerusalem, a member of the Council of the British Medical Assocication, the National Association for the Prevention of Consumption, and the Advisory Committee of the Society for the Feeble-Minded. Dr. Pope formerly held appointments at the Royal National Hospital for Consumption, Queen Victoria's Sanatorium, the Great Northern Hospital, and the Royal Hospital for

Diseases of the Chest, City Road, London. The medical profession in Leicester, and the staff of the Royal Infirmary in particular, have sustained the loss of one of their most distinguished members, whose place it will indeed be hard to fill.

SPECIAL REPORTS.

THE HEALTH OF DUBLIN.

The annual report on the health of Dublin for the year 1911, by Sir Charles Cameron, Medical Superintendent Officer of Health, is a portly volume of 280 pages. It is a matter of some difficulty to pick out of this mass of material what is really pertinent. Since the issue of the last report, the Medical Officer of Health has had, for the first time, the assistance of a medical man as full-time assistant. Curiously enough, we find no mention of this important fact in the report, nor does the assistant's name appear on any of the pages occupied by the names of the members of the staff of the Department of Public Health.

Dublin, as usual, shows a high birth-rate—32 per thousand of the population. It is worth noting that this is nearly double the rate in the suburbs—17 per 1,000. It would seem that in Dublin, as elsewhere, the lowered birth-rate chiefly affects the middle classes.

As usual, also, there is a high death-rate—23 per 1,000 of the population. This is 1.8 above the rate of the previous year, which showed the lowest rate on record. It is, moreover, nearly 50 per cent. higher than the death-rate (15.5) in 77 of the largest English towns in 1911. Only one of these English towns shows a rate of 20 or over. This is Liverpool, with 20 per 1,000, Stoke-on-Trent coming next with 19.9. The increased rate in Dublin last year was principally due to an abnormally large number of deaths from epidemic disease. The epidemic death-rate was almost twice the average for the past ten years—3.9 per 1,000 of the population as against 2 per 1,000.

Sir Charles Cameron professes himself unable to offer any explanation why there was a marked increase of infective disease in 1911, and he appears to adopt Sydenham's suggestion that at times the atmosphere assumes "an epidemical constitution." We may suggest a solid basis for this epidemical constitution in Dublin in 1911. The whole year was unusually dry, so that dust blew freely from January to October. The city—streets, laneways, yards, courts—is in the usual filthy condition in which it satisfied the Corporation of Dublin to keep it. Garbage—rotting vegetables, putrid fish, horse droppings, refuse of every sort—lay in the streets, and the yards and courts had their usual complement of rubbish heaps. All conditions were favourable for the production of infective dust, for the breeding of flies, and doubtless for the contamination of milk and other food. We note that Sir Charles Cameron expresses the opinion that no less than 74 cases of enteric fever were due to infected milk.

It will be remembered that last year the Public Health Department inaugurated a so-called campaign against flies! A price was put on the head of each dead fly brought to the offices of the Department. Small boys were armed with flappers as weapons and paper bags to carry their game. We learn that 21 bags were returned, holding in all about 126,000 flies, the cost to the rates being about 5s. 3d. Anything more ridiculous than this child's play, while leaving the breeding grounds intact, one cannot conceive.

The high rate of infective disease in 1911 affected practically all the zymotic diseases.

The deaths from diarrhœal diseases (643) were more than double the number in 1910 (238), which again was nearly double the number in 1909 (137). The deaths from typhoid (70) were more than double the number (32) in 1910. The number of deaths from diphtheria (89) was the highest on record. A curious error occurs in calculating the death-rate per 10,000 for this disease, the rate being given as 1.58 instead of 2.87. There was in 1911 a bad outbreak of scarlatina.

During the year the City Council, against the advice of the Medical Officer of Health, repealed a by-law forbidding the keeping of pigs within 50 feet of a dwelling. Of the 463 piggeries in the city, containing 4,626 pigs, 365 are within 50 feet of dwellings. We fear that this instance is characteristic of public health work in Dublin.

REVIEWS OF BOOKS.

INFANTILE PARALYSIS. (a)

This valuable monograph on the treatment of infantile paralysis has now been rendered accessible to the English-speaking profession by the excellent translation now before us, for which we are greatly indebted to Mr. Alan Todd, of Guy's Hospital. Starting with an account of the history of the disease, the author goes on to describe in picturesque language the symptoms and course as well as the ætiology and bacteriology of the condition. The work, as a whole, is divided into two main sections, the first of which is concerned with *general treatment*, while the second is devoted to the consideration of the *therapeutic measures* to be adopted in the varieties of paralysis met with. Special attention is directed to the general treatment in the acute stage and stage of repair during the first year. Isolation is very rightly insisted on as a precautionary measure. We are also pleased to note that Prof. Vulpius states that it is useless to prolong electrical treatment beyond a year, as this only tends in time to make the patient extremely nervous and excitable. Prevention of deformity is a matter which is too often neglected, and consequently the author refers at some length to the measures for securing this object. In the third or final stage some form of orthopædic apparatus is called for, and a chapter is given up to the consideration of these. In the chapter on the surgery of paralysis, Prof. Vulpius deals very thoroughly with such subjects as muscle transplantation, arthrodesis, tendon shortening and transplantation, as well as nerve transplantation.

In the second, or special, part, various forms of paralysis, according to their locality, are referred to in detail and their treatment carefully entered into. A special feature is the very complete records given by the author of actual cases which have been under his personal care. A very interesting chapter deals with cases of paralysis of extreme severity in which the patients are for the most part confined to bed or to invalid chairs. Even these cases can often be benefited by surgical measures, as several of the case histories given by the author prove beyond a doubt.

Now that attention is being so frequently directed to the subject of infantile paralysis, this volume appears most opportunely, for it supplies us with a highly impressive account of how much may be done for these unfortunate patients, not only in preventing possible deformities, but also relieving such as exist by orthopædic treatment carefully and scientifically carried out. Professor Vulpius is deservedly recognised as an authority of the first rank on orthopædic surgery in Germany, and now that his views and teaching are rendered accessible to his English confrères we feel certain that his work in this direction will be a real stimulus to greater exertions on the part of orthopædic surgeons in this country.

The wealth of illustrations is an additional feature of interest attaching to this volume, which it is a positive delight to study. It appeals to the physician as well as to the surgeon, for the former usually sees these cases in their earlier stages; while it also has an interest for the general practitioner, who, after studying it, will surely consider it his duty to look upon cases of infantile paralysis as by no means so hopeless as they were once considered to be. We are certainly under a debt of gratitude to the translator and his publishers for the care they have bestowed on the production of this delightful monograph in this its English dress. We trust that its perusal will go a long way towards revolutionising our ideas regarding the treatment of infantile paralysis.

(a) "The Treatment of Infantile Paralysis." By Oskar Vulpius, M.D., Professor Extraordinary at the University of Heidelberg. Translated by Alan H. Todd, M.B., B.S., B.Sc.Lond., House Surgeon, Guy's Hospital, late Resident Surgical Officer Royal National Orthopædic Hospital. With introduction by J. Jackson Clarke, M.B.Lond., F.R.C.S. Royal 8vo., pp. x., 318, with 243 figures in the text. London: Bailliere, Tindall and Cox. 1912. Price 10s. 6d. net.

CONDUCT AND ITS DISORDERS. (*a*)

Dr. Mercier never fails to be interesting, whether he is writing a deep philosophical treatise such as the present, or perpetrating a *jeu d'esprit* such as his altogether delightful "Preliminary Report on the Forcible Bathing of Prisoners." It was with keen anticipations of pleasure, therefore, that we took up this volume for perusal, anticipations which have been more than satisfied.

Dr. Mercier is led to study conduct much as Aristotle was led to the study of ethics, as a branch of biology. There has been some controversy as to whether he is really the pioneer he regards himself, but we think most of his critics have criticised him in ignorance of his position. Whether others have studied conduct prior to him is really immaterial. Columbus was not the first European to visit the New World. The important thing is that Dr. Mercier has studied conduct by a new method. He attempts to lay the foundations of a science of conduct, by attacking his subject on a systematic plan, his principle being derived from biology. In other words, he asks the question: Can human conduct be explained by biological principles? This is a question worth discussion, and if we remember that Dr. Mercier is concerned not with morality but with conduct, it may be admitted that he brings strong support for an affirmative answer.

The whole discussion bristles with points of interest, and it required great self-control in Dr. Mercier to follow his scheme straightforwardly, rather than to turn aside to one or other of the many tempting vistas which offered. We must be content to follow in the same path in this review. We content ourselves, therefore, with suggesting to our readers the lines the author has followed, and do not attempt any criticism or discussion either of his observations or his arguments.

Conduct, says Dr. Mercier, is action in pursuit of ends. The inquiry, therefore, may be conveniently divided into two—the study of action, and the study of ends. Dr. Mercier's methods of analysis of actions is by contrast of two more or less opposed forms of activity. Thus action is spontaneous or elicited, abundant or scanty, instinctive or reasoned, and so on. He develops such analysis in its many phases with an ease of argument and a wealth of illustration which are altogether admirable.

This, however, is only clearing the ground, and it is, when he comes to the discussion of ends that Dr. Mercier becomes more generally interesting. And here a new resemblance to Aristotle breaks out. Dr. Mercier's science of conduct bears more than a superficial resemblance to the Aristotelian doctrine of the mean. Given, says Dr. Mercier, that action is directed toward an end, that action may be excessive or defective. He adds, and here he breaks away from his great predecessor, that it may also be perverted or reversed. Here it must be admitted that a weakness appears. We can understand biological stimulus which causes either excess or perversion, and obstacles which may cause deficiency, but the explanation of reversed action on biological grounds is far from easy. Dr. Mercier fails to help us. "I must guard myself," he says (p. 87), "against being supposed to mean in such cases there is necessarily a real reversal of instinct. What happens is, no doubt, that some antagonistic instinct—for many instincts are antagonistic to others—has gained such predominance and exaggeration, as to swamp the instinct that seems to be reversed; and, for practical purposes, to abolish and supersede it, either for the time being, or permanently." But reversed action is not the same as action swamped or hindered. We require an explanation not of the failure of the action, but of its reversal.

This analysis, however, furnishes the scheme for the science of conduct. Dr. Mercier then discusses in brief the different forms of conduct, according to the end at which each aims, and under each head he suggests the variations from the norm—in excess or defect, perverted or reversed. Whether we agree with his contentions or not, his application of this scheme to the great departments of human activity is highly suggestive. Following him through the various fields of self-conservative and social conduct—morality, custom and fashion, sexual relations, parental conduct, patriotism, and even the fields of recreation and art, we find that, even if we are not satisfied that he has *the* key, he has at any rate *a* key which unlocks many doors.

Dr. Mercier's book is one that cannot be neglected by thinkers. Unlike most deep books, it is easy to read, even by those unused to philosophic writing. His lucidity is beyond praise. To medical men, and particularly to those who have to deal with deviations from the normal where conduct is deranged, we commend the book for earnest study. The reader who comes away without a wealth of suggestions for reflection is past caring for.

TRANSACTIONS OF THE ROYAL ACADEMY OF MEDICINE IN IRELAND. (*a*)

The Transactions of the Academy of Medicine for 1912 make, as usual, very interesting reading. A great variety of topics are dealt with, and some of the contributions reach a high standard. Mr. Moore records a death following the use of salvarsan. But one is rather doubtful whether his case (one of general paralysis of the insane) was one in which this drug was indicated. Ehrlich objects strongly to its use in this condition. Many of the fatalities recorded could have been prevented if the discoverer's rules had been observed. Some of the speakers favoured ambulatory treatment; but we are of the opinion that with such a powerful drug this is highly dangerous.

Messrs. Haughton and Stevenson contribute interesting papers on "Congenital Hip Disease." They have had very satisfactory results from the Lorenz method, and it marks a decided advance on the older "open" methods. Mr. Stoney reports encouraging results with "dioradin" in a series of fifteen cases of tuberculosis.

Dr. Rowlette's paper on the Insurance Act clears many perplexities on a topical subject. On the whole in favour of the Act, he pointed out the effect it would have on voluntary hospitals and on medical teaching, especially in maternity schools. In this he was seconded by Dr. Jellett, who has done much to draw attention to the effect it will have unless altered on the teaching of students and midwives.

One of the most interesting papers is by Dr. Dawson on the relation of insanity to life in Ireland. He brings out several curious facts—*e.g.*, that insanity tends to be more marked in agricultural counties; its distribution bears little relationship to that of emigration, crime or alcoholism, and none to density of population, death-rate, or drunkenness. In contradistinction to England, drunkenness is more marked in rural districts than in towns. This paper will bear careful perusal.

The Rotunda Hospital reports, as usual, show general progress and contain two items of special interest. The use of vaccines in puerperal sepsis has now had a sufficiently long trial to enable a definite opinion of their value to be formed. Dr. Rowlette's work has led to their routine use in all septic cases. Hospital stock vaccines, and autogenous ones if these fail, are used in preference to the commercial stock ones. Small doses are employed at short intervals,

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(*a*) "Conduct and Its Disorders Biologically Considered." By Charles Arthur Mercier, M.D., F.R.C.P., F.R.C.S., Physician for Mental Diseases to Charing Cross Hospital. Pp. XXIII. and 377. London: Macmillan and Co. 1911. Price 10s. net.

(*a*) "Transactions of the Royal Academy of Medicine in Ireland." Vol. XXX. Edited by J. Alfred Scott, M.A., M.D., F.R.C.S.I., General Secretary. Pp. xl. and 521. Dublin: John Falconer. 1912.

and the results prove the value of this dosage. This paper is likely to be widely quoted, and treatment along these lines seems to be opening out in a promising fashion. The Master of the Rotunda Hospital has recorded the first case in Ireland of removal of a thrombosed ovarian vein in a case of pyæmia. As the mortality of cases left without operation is 60 per cent., as against 15 per cent. of those operated on, there is every justification for this procedure. The difficult point is to know when to interfere—should one be guided by the number of rigors or wait till a palpable mass forms?

Dr. Tweedy introduced a very instructive discussion on the operative treatment of uterine prolapse. Each operator seems to favour his own methods. The operation first described by Dr. Jellett of shortening the utero-sacral ligaments marks a real advance in treatment. The ideal method would seem to lie in thorough repair of the perineum coupled with suspension of the uterus to the abdominal wall and tightening the utero-sacral ligaments by Dr. Jellett's method. But each case needs individual treatment; the final word has not yet been said regarding this subject.

THE NURSES' COMPLETE MEDICAL DICTIONARY. (a)

It is a difficult task to compile a book containing a "complete vocabulary of terms which a nurse is likely to meet in her daily work," and at the same time to bring it within reasonable pocket compass both as regards size and price. This has been attempted with some degree of success by the author of this little dictionary, which no doubt will find a niche in many a nurse's library, though some of the words, including such as "ice," "wrist," "yawning," "bath," etc., scarcely appear to need any definition; whilst others—viz., "ponogene," "loinology," "elinquation," and "helcoma," can hardly be called terms that a nurse or anyone else is likely to meet in her daily work. A list of the usual abbreviations used in medicine adds to the usefulness of the book, also the tables of weights and measures for handy reference.

NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

Allen, George, and Co., Ltd. (London).

The Sheep and Its Cousins. By R. Lydekker, F.R.S. With 61 illustrations. Price 10s. 6d.

The Elements of Child Protection. By Sigmund Engel, translated by Dr. Eden Paul. Pp. 276. Price 15s.

Appleton, D., and Co. (New York and London).

The Principles and Practice of Medicine. By Sir Wm. Osler, Bart., M.D., F.R.S. Eighth Edition. With the assistance of Thomas McCrae, M.D., F.R.C.P. Pp. 1,225. Price 21s.

Bailliere, Tindall, and Cox (London)

Handbook of Diseases of the Ear Fourth Edition. By Richard Lake F.R.C.S. Revised and enlarged, with 4 coloured plates and 77 original illustrations. Price 7s. 6d.

The Care and Treatment of European Children in the Tropics. By G. Montagu Harston, M.D.Lond., M.R.C.S.Eng. With Introduction by Sir Patrick Manson, G.C.M.G., M.D., LL.D. Pp. 248, with 17 coloured and plain plates. Price 7s. 6d.

Text-book of Medicine. By G. Dieulafoy, Professor of Clinical Medicine in the University of Paris. Translated from the sixteenth French Edition by Drs. V. E. Collins and J. A. Liebman. 17th thousand in 2 vols, pp. 2,156, with 99 figures and 9 coloured plates. Price 25s.

The Course of Operative Surgery. By Professor Victor Schmieden, with introduction by Professor Bier. Translated and edited by Arthur Turnbull, M.B., B.Sc. Pp. 365. with 435 illustrations, plain and coloured. Price 12s. 6d.

The Nutrition of the Infant. By Ralph Vincent, M.D., M.R.C.P.Lond. Fourth Edition. Pp. 360, with 17 coloured and plain plates. Prices 10s. 6d.

The Prevention of Some Common Diseases in Childhood. By J. Sim Wallace, D.Sc., M.D., L.D.S. Pp. 112. Price 3s. 6d.

Practical Chemistry, including Volumetric Analysis and Toxicology. By Professor A. E. Richards, F.I.C., Second Edition. Pp. 150. Price 3s.

Aids to the Diagnosis and Treatment of Diseases of Children. By John McCaw, M.D., R.U.I. Fourth Edition. Pp. 445. Price 4s.

Bale, John, Sons, and Danielsson, Ltd. (London).

Surgery for Dental Students and Junior Medical Students. By A. S. Underwood and B. Underwood, M.B., B.S. Pp. 244. Price 3s. 6d.

Studies in Clinical Medicine. By C. D. Hawthorne, M.D., F.F.P. and S.Glas. Pp. 240. Price 6s.

Tropical Medicine and Hygiene. By C. W. Daniels, M.B.Cantab., M.R.C.P.Lond. In Three Parts. Part III. Diseases due to Bacteria. Pp. 250. Price 7s. 6d.

Churchill, J. and A. (London).

Alcoholism: Its Clinical Aspects and Treatment. By Francis Hare, M.D. Pp. 276. Price 5s.

Constable and Co., Ltd. (London).

Decisions of the Law Courts under the Medical Act, 1858, and the Dentists Act, 1878. Collected and arranged by C. J. S. Harper. Pp. 377. Price 10s. 6d.

Cornish Bros. (Birmingham).

Coprostasis: Its Causes, Prevention and Treatment. By Sir Jas. Sawyer, M.D., F.R.C.P. Pp. 74. Price 2s. 6d.

Fisher Unwin, T. (London).

Hypnotism and Disease. By Hugh C. Miller, M.A., M.D. With Introduction by B. C. Lloyd Tuckey, M.D. Pp. 252. Price 5s.

Gale and Polden, Ltd. (London).

Guide to Promotion for Non-Commissioned Officers and Men, R.A.M.C. Compiled by Capt. S. T. Beggs, M.D. Pp. 434. Price 3s. 6d.

Harrison and Sons (London).

An Operating Theatre in Private Practice. By C. H. Whiteford, M.R.C.S., L.R.C.P. Pp. 76.

Hewitt, William G. (Brooklyn).

St. Luke's Hospital: Medical and Surgical Reports. Vol. III. Pp. 554. Illustrated.

King, P. S., and Son (Westminster).

Hygiene for Health Visitors, School Nurses, etc. By C. W. Hutt, M.A.Cantab., D.P.H. Pp. 452. Price 7s. 6d.

Medical Benefit: A Study. By J. G. Gibbon, B.A., D.Sc. Pp. 296. Price 6s.

Causes Leading to Educational Deafness in Children. Reprinted from *The Lancet* by Macleod Yearsley, F.R.C.S.

Lewis, H. K. (London).

Massage and the Original Swedish Movements. By K. W. Ostrom. Seventh Edition. Pp. 216. Price 3s. 6d.

Materia Medica and Pharmacy. By Reginald R. Bennett, B.Sc., F.I.C. Second Edition. Pp. 246. Price 4s. 6d.

Lippincott, J. B., Co. (Philadelphia and London).

The Pituitary Body and Its Disorders. By Harvey Cushing, M.D. Pp. 342, with 319 illustrations. Price 18s.

Livingstone, E. and S. (Edinburgh).

Extraction of Teeth. By J. H. Gibbs, F.R.CS., L.D.S.Ed. Pp. 163. Price 7s. 6d.

Malingering and Its Detection. By A. McKendrick, F.R.C.S.Ed. Pp. 94. Price 1s. 6d.

Longmans, Green and Co. (London).

Manual of Surgical Treatment. By Sir W. Watson Cheyne, Bart., C.B., F.R.C.S., F.R.S., and F. F. Burghard, M.S., F.R.C.S. New edition in 5 vols entirely rewritten by T. P. Legg, F.R.C.S., and Arthur Edmunds, F.R.C.S. Vol. III. Pp. 604, with 271 illustrations. Price 21s.

Oxidations and Reductions in the Animal Body. By H. D. Dakin, D.Sc., F.I.C. Pp. 142. Price 4s.

The Prognosis and Treatment of Diseases of the Heart. By R. O. Moon, M.D.Oxon., F.R.C.P.Lond. Pp. 120. Price 3s. 6d.

The National University of Ireland Calendar for 1912. Pp. 428.

Experimental Physiology. By E. A. Schäfer, F.R.S. With 83 illustrations. Price 4s. 6d.

Maclehose, J., and Sons (Glasgow).

Life of Sir Wm. Tennant Gairdner. By Geo. Alex. Gibson, M.D., LL.D. Pp. 816. Price 10s. 6d.

Macmillan and Co., Ltd. (London).

Diseases of the Liver, Gall-Bladder and Bile-Ducts. By Humphry D. Rolleston, M.D.Cantab., F.R.C.P.Lond. With plain and coloured illustrations. Pp. 812. Price 25s.

Anæsthetics and Their Administration. By Sir Frederick W. Hewitt, M.V.O., M.D. Fourth Edition. With the assistance of Henry Rolinson, M.D.Cantab. Illustrated. Pp. 676. Price 15s.

Milner and Co. (Halifax).

Dactylography, or Study of Finger Prints. By Hy. Faulds, L.R.F.P. and S. Illustrated. Price 1s.

Rebman, Ltd. (London).

Pathology and Treatment of Diseases of Women. By Professor A. Martin and Professor Ph. Jung. Translated by Hy. Schmitz, M.D. Pp. 476. Price 21s.

X-Ray Treatment of Skin Diseases. By Dr. F. Schultz, translated by Jas. Burnet, M.D., M.R.C.P.Ed. With 130 illustrations. Price 12s. 6d.

Guide to Midwifery. By D. B. Hart, M.D., F.R.C.P.Ed. With 4 coloured and 268 plain illustrations. Price 25s.

Manual of Clinical Chemistry, Microscopy, and Bacteriology. By Drs. Klopstock and Krovarsky, translated by the Rebman Company. Illustrated. Price 12s. 6d.

Swift, Stephen and Co., Ltd. (London).

The Doctor and His Work. By Chas. J. Whitby, M.D.Cantab. Pp. 235. Price 3s. 6d.

Wright, John, and Sons, Ltd. (Bristol).

Heredity, Education, and Vitalism. By Ronald C. Macfie, M.D., C.M. Pp. 302. Price 6s.

Diseases of the Throat, Nose and Ear. By W. G. Porter, M.B., F.R.C.S.Ed. Pp. 276, with 77 illustrations, plain and in colours. Price 7s. 6d.

(a) "The Nurses' Complete Medical Dictionary." Compiled by M. Theresa Bryan, Samaritan Hospital for Women, London. Pp. 206. London: Bailliere, Tindall and Cox. 1912. Price 2s. net.

MEDICAL NEWS IN BRIEF.

The Memorial to Lord Lister.

A representative meeting was held last week at the Mansion House, under the presidency of the Lord Mayor, in support of the scheme for raising a fund to establish a memorial to Lord Lister. Among those present were Mr. G. W. Spencer-Lyttelton, representing Prince Alexander of Teck; Lord Cromer, the Dean of Westminster, Sir Thomas Barlow, Sir Francis Champneys, Professor Howard Marsh (Master of Downing College, representing the Vice-Chancellor of Cambridge University), Sir William Osler (Oxford University), Sir J. Wolfe Barry, Lord Kinnaird, the Dean of St. Paul's, Mrs. Garrett Anderson, M.D., Sir J. Bland-Sutton, Sir Victor Horsley, the Hon. W. F. D. Smith, Mr. Boyton, M.P., Mr. F. Morris Fry, Sir W. Watson Cheyne, Hon. Treasurer, and Sir J. Rose Bradford, Hon. Secretary.

The following resolution, moved by the Lord Chancellor, was adopted:—"That this meeting is of opinion that the priceless services of the late Lord Lister to the cause of science and the alleviation of human suffering should be commemorated by a suitable memorial."

The second resolution, moved by Lord Avebury, was also carried unanimously:—"That this meeting cordially supports the scheme which has been adopted by the general committee appointed for the purpose of deciding what should be the form of the memorial—namely, a memorial in Westminster Abbey, to take the form of a tablet with medallion and inscription; the erection of a monument in a public place in London; the establishment of an international Lister Memorial Fund for the advancement of surgery, from which either grants in aid of researches bearing on surgery or awards in recognition of distinguished contributions to surgical science should be made, irrespective of nationality.

Charing Cross Hospital—The Huxley Lecture.

The Huxley Lecture on "Recent Advances in Science in Relation to Practical Medicine" will be delivered in the Out-patients' Hall of the Hospital on Thursday, the 31st inst, at 3.30 p.m., by Prof. Simon Flexner, M.D., Director of the Rockefeller Institute, New York, with Sir William Osler in the chair.

At 2.30 p.m. on the same day, preceding the lecture, the series of new Laboratories of Public Health and Bacteriology recently formed by the School will be formally opened and handed over to the University of London King's College as their University Laboratories in Public Health and Bacteriology.

"Master's Day" at the Society of Apothecaries.

According to ancient custom, the Society of Apothecaries of London kept "Master's Day" by attending Divine service last week at their quaintly-named parish church of St. Andrew-by-the-Wardrobe. A striking sermon on St. Luke, "the beloved physician," was preached by the new clerical Master of the Mercers' Company—the Rev. Stuart Palmer, who is a medical graduate of Edinburgh University. The new Master of the Company is Dr. Bramley Taylor, who succeeds Sir Thomas Crosby, Lord Mayor of London.

Writers' Cramp as Industrial Disease.

The Home Secretary has requested the Departmental Committee which has been appointed to consider the question of the extension of the Workmen's Compensation Act, 1906, to certain industrial diseases, to consider and report to him on the further question whether writers' cramp should be included under the Act.

Any communication on the subject of the inquiry should be addressed to the Secretary to the Committee at the Home Office.

University of Bristol—Honorary Degrees.

At the installation of Lord Haldane as Chancellor of the University of Bristol, on the 17th inst., when honorary degrees were conferred on, among others, the Prime Minister, the Rt. Hon. A. J. Balfour and Lord Roberts, the following honorary degrees were also conferred on local medical men:—The degree of M.D.S. on Mr. W. R. Ackland; the degree of M.Ch. on Mr. Nelson C. Dobson, F.R.C.S., and Mr. J. Paul Bush, C.M.G.; the degree of M.D. on Dr. R. Shingleton Smith, M.D., F.R.C.P., and Mr. Geo. Munro Smith; the degree of LL.D. on Prof. J. Michell Clarke, F.R.C.P., pro Vice-Chancellor of the University, Mr. F. Richardson Cross, F.R.C.S., and Dr. D. S. Davies, M.D., Medical Officer of Health for Bristol.

Medical Sickness and Accident Society.

At the usual monthly meeting of the Executive Committee of this Society there were present Dr. F. J. Allan (in the chair), Drs. St. C. B. Shadwell, J. Pickett, F. C. Martley, Major Greenwood, Knowsley Sibley, G. N. Caley, Frederick S. Palmer, Mr. F. S. Edwards, H. P. Symonds, and Dr. J. B. Ball. The accounts presented showed that there was a diminution in the number of claims for the month of September, and although the amount paid away was heavy it was under the expectation. The audited accounts and balance sheet for the half-year ending June 30th were presented, and it was gratifying to note that the prosperity of the Society is still increasing in a marked degree. The funds of the Society now amount to over a quarter of a million, and provide ample security for the satisfaction of any claims that may be made. That large funds are required is evidenced by the fact that over £15,000 was paid in sickness benefit last year, and that this sum is likely to be exceeded during the current year. The work being carried on under a system of mutual self help, each member doing his best to promote the interests of the Society, has combined to made it one of the most successful societies of its kind in existence.

Society for Relief of Widows and Orphans of Medical Men.

At the recent quarterly Court of the Directors of the above Society, the Rt. Hon. Sir Thomas Boor Crosby, Lord Mayor, President of the Society, in the chair, three gentlemen were elected members of the Society. The sum of £514 was voted to be distributed at Christmas among the annuitants of the Charity, each widow to receive £10, each orphan £3, and each orphan on the Copeland Fund £10. This is in addition to the half-yearly grants made in January and July.

The Society only grants relief to the widows and orphans of its deceased members, and the Secretary is constantly receiving letters from widows of medical men asking for assistance, but this has to be refused, as their husbands had not joined the Society. Membership is open to any registered medical practitioner who at the time of his election is resident within a twenty-mile radius of Charing Cross. The annual subscription is two guineas, and there are special terms for life membership. The invested funds of the Society now amount to £101,600.

Further particulars and application forms for membership may be obtained from the Secretary at the offices of the Society, 11 Chandos Street, Cavendish Square, London, W.

University of Oxford.

At a Congregation held on October 24th, the following degrees were conferred:—D.M., A. R. Wilson, Wadham; B.M., J. L. Birley, University.

A tablet is shortly to be placed upon the wall of the Edinburgh Hospital for Women and Children to perpetuate the memory and career of Dr. Sophia Jex-Blake, M.D., founder of the hospital, "to whose large courage, insight, and constancy the admission of women to the profession in this country is mainly due."

Dr. Reginald Edward Thompson, M.D., F.R.C.P., a director of the University Life Assurance Society and for some years consulting physician to the Brompton Hospital for Consumption, who died on September 10, aged 78, left estate of the gross value of £7,195, of which the net personalty has been sworn at £7,058.

SUMMARY OF RECENT MEDICAL LITERATURE ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Vaccines in the Treatment of Puerperal Sepsis.—Rowlette (*Journ. Obs. and Gyn. Brit. Emp.*, xxi., 6) records a series of cases treated by vaccines in the Rotunda Hospital. Fifty-four patients were inoculated, a bacteriological diagnosis being made in 39 by the method of Döderlein. In five cases autogenous vaccines were used, and these were subsequently employed as stock vaccines. At first 2½ million cocci in streptococcal cases were given as the initial dose, but this was later increased to 5 million and never gave any bad results. In staphylococcal infections the initial dose was 20-25 million and occasionally as high as 50 million. Thirty-one cases of streptococcal injection were treated and in no case did any harm result from the inoculation. For the present the author draws the following conclusions: Vaccines given in small doses do no harm in puerperal sepsis; in the great majority of cases they do good; in many cases they produce immediate and remarkable improvement; autogenous are more trustworthy than stock vaccines, and sometimes succeed rapidly where the latter fail; anti-streptococcus serum, given simultaneously, increases the effect of vaccine; to get the best results accurate bacteriological diagnosis is necessary. F.

Retention of the Fœtus by an Internal Contraction Ring Treated by Continuous Weight Traction.—Willett (*Journ. Obs. and Gyn. Brit. Emp.*, xxi., 6) records a case of a multipara with 10 children all delivered naturally. Labour continued slight for 28 hours before the os was fully dilated, the membranes having ruptured early. The pulse rate having then begun to rise and reached 132 per minute, it was deemed advisable to empty the uterus. The head was easily brought down to the outlet, but there was great difficulty in delivering over the perinæum. When this was effected, it was found that the shoulders were firmly retained in the uterus by a thick ring, which encircled the neck. The child was dead, but there was too great danger to attempt embryotomy. The head was, accordingly, perforated and a cranioclast applied; to the handles of this an 8-pound weight was attached and hung over the end of the bed. Half a grain of morphia was given and the patient slept for three hours, after which a few pains expelled the fœtus, which weighed 6 lbs. 14 ozs.

Two other cases of obstruction of labour are recorded in the same journal by Williamson and Shannon. One was delivered by prolonged traction with forceps, the other by version, the former resulting in a rupture of the uterus and vagina. The latter was effected with considerable difficulty and danger to the patient. In both cases the fœtus was grasped by the neck. F.

Findings at Secondary Operations.—Polak (*Amer. Journ. Obs.*, lxv. 6), reports the findings in 139 women, of whom 42 had been previously operated upon by the author. The cases are grouped as follows: Where bad judgment was shown in the selection of the first operation, where an incomplete operation was done or the diagnosis was incomplete, where conservation had resulted in the conserved organ becoming diseased, where hernia had followed abdominal drainage, where peritoneal toilet had been hasty, where troublesome visceral adhesions had resulted. F.

Abdominal Cæsarean Section.—Petersen (*Surg. Gyn. and Obs.* xv. 1.) considers (1) the position of Cæsarean section in contracted pelvis with induction of labour as to which is most advantageous to the mother and child in degrees of contraction between 7.5 and 9.5 cm. If there is a choice of method, induction should not be done under the 36th week. (2) Under what conditions is craniotomy of the living child indicated in preference to Cæsarean section? (3) Under what conditions is pubiotomy preferable? (4) Under what septic conditions is Cæsarean section indicated and when is the operation unjustifiable? (5) What type of the operation is to be selected in different cases? F.

Pelvic Inflammation in Women.—Lock (*Journ. Obs. and Gyn. Brit. Emp.* xxii. i.) studies 118 cases, 100 of which were operated upon. In a large proportion no organism could be found. The commonest course of infection is ascending, but may be descending in tubercular infection and from the intestinal tract. The gonococcus may ascend soon after infection and cause double salpingitis with consequent sterility, which was the general history given by those patients in whom that organism was evidently the cause of disease. It may remain latent in the cervix and only ascend to the tubes after a pregnancy has occurred. A history of sterility with recurrent attacks of pain and discharge is practically diagnostic of gonorrhœal infection. Hydrosalpinx was either double or associated with salpingitis of the opposite side and the symptoms dated back to the last puerperium. In none did the history suggest gonorrhœa. In nearly half the cases of pyosalpinx the condition was double, and in all cases the opposite tube was inflamed. Of 12 with a definite history of gonorrhœa nine were sterile. In the cases of pelvic inflammation all that were operated upon had been confined within 10 weeks except one, with an interval of seven months, and in all the cases in which the pus was examined the streptococcus was isolated. In five cases there were abscesses in the uterine wall. F.

Rodent Ulcer Following Psoriasis.—Gray (*Brit. Journ. of Dermatology*, September, 1912) gives the history of a lady, æt. 56, who had suffered from psoriasis for thirty-two years, and in spite of various forms of treatment had never been completely cured. Although the patient had taken considerable quantities of arsenic, there was no sign of arsenical keratosis. Three years ago a small ulcer formed in the gluteal cleft, and gradually increased in size in spite of treatment with X-rays and radium. The ulcer was situated in the middle line and extended rather more to the left than to the right. It was attended with considerable pain and some discharge. On the left side the margin of the ulcer was continuous with an old patch of psoriasis, but at the right margin the skin was normal. As a diagnosis of malignant ulceration was made the ulcer was freely excised. On histological examination it proved to be a rodent ulcer. There does not appear to be any previous case of rodent ulcer in this situation recorded, though one has been described in the groin, and Whitfield has recorded one as occurring in a psoriasis patch on the shoulder. In the majority of cases of epithelioma which have been described as occurring in psoriasis patches there has been marked evidence of the so-called arsenical keratosis, but this was quite absent in the cases described by Whitfield and Gray. It is interesting to note that the treatment with X-rays and radium failed entirely to control either the pain or discharge from the ulcer. Y.

Diabetes Mellitus and Tuberculosis.—Montgomery (*Amer. Journ. of the Med. Science*), October, 1912) in an interesting paper discusses some of the relations of these two diseases. From the evidence he has collected he has not been able definitely to prove that tuberculosis occurs more frequently in diabetics than in the general population at the same age periods. He has, however, been impressed by two facts: (1) the lowered opsonic index to the tubercle bacillus and a number of other bacteria in diabetes; and (2) the large number of cases of diabetes that late in the course of the disease develop a very acute, extensive, and rapidly fatal form of pulmonary tuberculosis. Out of 355 autopsies collected from the literature since 1882, including Montgomery's twenty-five cases, 138 or 38.9 per cent. revealed pulmonary tuberculosis, mostly in an acute form. In no single instance was tuberculosis of bones found to be associated with diabetes. As a rule, when the two diseases occur together, the diabetes and not the tuberculosis can be shown to have been the primary trouble. From the number of patients that have improved both as to their tuberculosis and diabetes, one cannot consider the prognosis in the combination of diabetes and tuberculosis as necessarily more hopeless than in either disease alone. K.

Changes in the Ureter Resulting from Tying It.—Corbett (*Amer. Journ. of the Med. Sciences*, October, 1912) reviews the conclusions of experimental workers on this important problem. At the beginning of his researches he hoped to be able to tell in a single word whether or not it would always be necessary to remove a kidney having an atresia of the ureter from any cause. He soon found, however, that the answer must be ambiguous, for the results of atresia of the ureter do not always seem to be the same. There almost always results severe destruction of the kidney after prolonged obstruction, and to save to any extent the functional capacity of the kidney the obstruction must be removed not later than six to ten days. In cases where the obstruction has lasted more than twenty-four days the removal of the kidney seems justifiable on the following grounds: (1) There remains but little functioning kidney. (2) Hydronephrosis is a common result of atresia of the ureter and its existence is always a potential danger. (3) In some cases there occur changes in the untouched kidney and we are led to assume that these changes result from the presence of the no longer functioning kidney. That infection of the hydronephrotic fluid by low grade bacteria may be the cause of these kidney changes, does not alter the conclusion. K.

Two Cases of Stabbed Heart Treated by Immediate Suture.—Mossop (*South African Med. Rec.*, July 27, 1912) reports the following:—Case I.—A coloured male, æt. 31, was admitted to hospital an hour after being stabbed in the chest. On arrival he was conscious, but in a collapsed condition; very restless; pulse 130. There was an incised wound in the fifth intercostal space, just internal to the nipple line. His clothes were soaked in blood, though none was escaping at the time. It was obvious that serious internal hæmorrhage was taking place. Under light chloroform anæsthesia, the wound was enlarged, the fifth costal cartilage was found divided, and an inch of it and of the sixth were removed. Blood was escaping into the left pleural cavity at each diastole through a slit-like wound in the pericardium. With sutures at the edges of the pericardial wound to act as retractors, this wound was enlarged and great hæmorrhage followed, which made it impossible to find the seat of bleeding. After removing the cartilage of the fourth rib, and introducing the finger it was possible to tilt the heart upwards and to the left, so as to bring the ventricles into view. A wound was then seen in the right ventricle, leaking blood at each diastole. This was closed with three sutures of chromicised catgut, passed on a fine fully curved bowel needle. The passage of the sutures did not seem to incommode the action of the heart, but while they were being tied its action became so tumultuous as to make it difficult to distinguish systole from diastole. The sutures checked hæmorrhage immediately. A fine rubber tube with a gauze wick was anchored to the pericardial opening. Lavage was not employed, and the clot in the pleural cavity was left to be absorbed. The patient recovered and left hospital in six weeks. Case II. A Spaniard had received seventeen stab wounds, one of which, about an inch long, was situated in the fourth intercostal space, one inch to the left of the sternum. By a similar procedure to that in the last case, the heart was exposed, and a wound in the left ventricle sutured. The patient recovered. S.

The Venous Origin of Middle Meningeal Hæmorrhage.—Jones (*Med. Review*, September, 1912) holds that the grooves on the cerebral surface of the cranial bones are due not so much to the middle meningeal artery and its branches as to the interdural venous sinuses which course for the most part with the branches of the artery. The artery is but a small constituent of a much wider vascular channel, the bulk of which is composed of meningeal venous sinuses. These are mere clefts in the thickness of the dura mater, lined by endothelium, like the well-recognised intracranial sinuses. The writer showed that it was impossible to cause any extensive separation of the dura mater from the bone without some laceration of the venous sinuses, the artery remaining uninjured. He examined three cases in which death resulted from middle meningeal hæmorrhage, and in each case the only lesion found was in the cranial wall of the venous sinus which accompany the middle meningeal artery. The integrity of even the most minute arterial twigs was striking. In children, a trivial injury, so slight that no symptoms of concussion are evident at the time, may produce fatal meningeal hæmorrhage. He quotes a case from Erichsen where a child ate her dinner after a fall down stairs and was found dead in bed next morning. There was a clot between the dura and the bone on the side on which the head had been struck, but without any fracture. It was not likely that the artery was injured. He points out that the bleeding when opening the skull is more venous than arterial in character. It usually wells up out of the wound, and is easily controlled by pressure. Cases where arterial ligation is necessary are exceptional, and compression of the common carotid artery often has no effect on the hæmorrhage. S.

Rupture of the Colon from Injection of Compressed Air.—Cotton (*Med. Review*, September, 1912) reports a case in which, as a practical joke, the nozzle of a compressed air tube was brought against (not inserted into) the anus of a boy, æt. 16, outside his clothes, and the current turned on. He suffered sudden sharp pain and fainted, and was brought to hospital, where the abdomen was opened two hours after the accident. Before opening the peritoneum, the operation wound was filled with normal saline. When the peritoneum was opened large amounts of air burst and bubbled through this fluid. Over the whole of the colon were multiple sub-peritoneal hæmorrhages. At various points on the sigmoid, descending and transverse colon the peritoneum was torn, and in five places the longitudinal bands were also torn, the torn ends being separated for about three inches, without damage to the deeper muscular layers. The bands and peritoneal tears were sutured. Just above the base of the cæcum was a perforation half an inch in diameter. A right-angled glass tube was sewn into it, and brought out through a small incision near McBurney's point. Two days later bowel contents were draining freely through the tube. The patient recovered. The writer uses extra strong tubes in all cases in which gut of doubtful strength or vitality must otherwise be left under conditions of probably increased internal pressure from gas, due to atony of the gut from any cause. This procedure applies not only to pneumatic, but also typhoid and similar perforations, and to doubtful bits of gut in strangulated hernia, and often does away with the necessity of resection. S.

DR. ROGER N. GOODMAN, of Kingston, has presented the Queen Elizabeth Grammar School of the borough with a leaving scholarship of £60 a year.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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Contributors are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Dr. L. H. P. (London, W.).—We quite agree with you that some degree of medical censorship might well be established over the advertisements that, in many instances, deface the hoardings with their glaring inaccuracies. The latest example of how not to do it may be seen in the poster depicting a damsel about to titillate the submental region of a particularly placid-looking bovine, beneath which affecting scene appear the words, "—— (a well-known meat extract) tickles the *palate*." (The italics are ours.)

MUSEUM OF SAFETY AND HEALTH APPLIANCES.

The Home Secretary has stated in reply to Mr. Gill that a scheme for a museum of safety and health appliances has been under consideration for some time. It has been decided to erect a special building for the purpose, and a site has been secured in a central position in Westminster. Plans have been prepared after consideration of the arrangements in the most important of the museums of this kind on the Continent, and it is hoped that a beginning will be made with the erection of the building at an early date.

Dr. R. S. J.—The drug referred to was tried by several practitioners in cases it was reputed to benefit, but as the results were negative, it went, as a matter of course, out of use, and has not been heard of for some time.

Edinburgh Student.—You will see that new editions of two of the books on your list are announced in another column. You should have no difficulty in procuring the other, as we understand it is not out of print.

Meetings of the Societies, Lectures, &c.

Wednesday, October 30th.

Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.).—5.30 p.m.: Mr. J. F. Colyer.

Hospital for Consumption and Diseases of the Chest (Brompton, S.W.).—4.30 p.m.: Dr. Mackenzie: Artificial Pneumothorax.

Thursday, October 31st.

Royal Society of Medicine (Section of Neurology) (1 Wimpole Street, W.).—8.30 p.m.: Presidential Address: Dr. H. H. Tooth, C.M.G.: Observations upon the Growth and Survival Periods of Cerebral Tumours, Based upon the Records of 500 Cases, with Special Consideration of the Group of the Gliomata (illustrated by micro-photographs).

Child Study Society, London (Royal Sanitary Institute, 90 Buckingham Palace Road, S.W.).—6.15 p.m. to 7.15 p.m.: Mrs. F. F. Andrews: Reception and Short Address. 7.30 p.m.: Dr F. H. Hayward: Statistical Theory for Teacher and Administrator.

Harveian Society of London (Stafford Rooms Titchborne Street, Edgware Road, W.).—8.30 p.m.: Discussion on the Preparation of the Patient, Selection of Anæsthetic, and Method in Difficult Types of Persons during Abdominal and Pelvic Operations (opened by Dr. D. Buxton).

Friday, November 1st.

Royal Society of Medicine (Section of Laryngology) (1 Wimpole Street, W.).—4.30 p.m.: Cases and Specimens by the President, Mr. J. F. O'Malley, Mr. F. F. Muecke, Mr. A. R. Tweedie, Dr. James Donelan, Mr. H. J. Davis, and others.

Royal Society of Medicine (Section of Anæsthetics) (1 Wimpole Street, W.).—8.30 p.m.: Dr. G. A. H. Barton, Dr. J. F. W. Silk, Mr. H. E. G. Boyle and Mr. G. E. Gask

Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.).—5 p.m.: Prof. A. Keith.

Appointments.

Crookshank, F. G., M.D., M.R.C.P., Assistant Physician to the Belgrave Hospital for Children.

Graham, G. M., M.B., Ch.B.Edin., Junior Assistant Medical Officer at the Stirling District Asylum, Larbert.

Howell, B. Whitchurch, M.R.C.S., L.R.C.P., House Physician at the Royal Free Hospital.

O'Sullivan, D., M.B., B.Ch., R.U.I., Certifying Surgeon under the Factory and Workshop Acts for the Dingle District of the county of Kerry.

Ransom, P. W., M.R.C.S., L.R.C.P., House Surgeon at the Royal Free Hospital

Simmonds, B. Sangster, M.B., B.S., M.R.C.S., L.R.C.P.Lond., Resident Casualty Officer at the Hampstead General and North-West London Hospital.

Vacancies.

Down County Infirmary.—House Surgeon. Salary £60 per annum, with board and residence. Immediate application to Dr. Tate. (See advt.)

Corporation of London.—Medical Officer of Health. Salary £1,000 per annum. Applications to the Town Clerk on or before November 11th. (See advt.)

Teignmouth Hospital, S. Devon.—House Surgeon. Salary £100 per annum, with board, lodging, and laundry. Applications to the Honorary Secretary.

Tooting Bec Asylum, Tooting, S.W.—Third Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, Tooting Bec Asylum, Tooting, S.W.

Warwick County Asylum.—Second Assistant Medical Officer. Salary £175 per annum, with board, apartments, and laundry. Applications to Dr. Miller, Hatton, Warwick.

The Middlesex Hospital, W.—Third Assistant. Salary £150 per annum. Applications to F. Clare Melhado, Secretary-Superintendent.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Bicester (Oxon), Blyth (Northumberland).

Births:

Campbell.—On Oct. 26th, at 13 Lynedoch Place, Edinburgh, the wife of Basil Patrick Campbell, F.R.C.S.Edin., of a daughter.

Dingle.—On Oct. 24th, at Sandakau, British North Borneo, the wife of Percival A. Dingle, M.R.C.S.Eng., L.R.C.P.Lond., of a son.

Taylor.—On Oct. 23rd, at Tun Bridge, Liphook, Hants, the wife of J. J. Taylor, M.A., M.D.Cantab., of a son.

Marriages.

Sheldon—Kensington.—On Oct. 24th, at the Church of St. John the Baptist, Thayetmyo, Burma, John Henry Sheldon, M.B.Lond., M.B., Ch.B.Vict., Burma Railways, second son of the late J. H. Sheldon, of Manchester, to Eleanor Gladys Kensington, M.B., B.S.Lond., younger daughter of Col. Edgar Kensington, late Royal Artillery.

Stevens—Patch.—On Oct. 22nd, at Tunbridge Wells, G. J. B. Stevens, L.R.C.P., M.R.C.S., and L.S.A., to Sarah Jane, youngest daughter of the late William and Jane Patch, formerly of Merriott, Somersetshire.

Deaths

Hayes.—On Oct 24th, at Audrey, Bognor, Thomas E. D. Hayes, M.D., in his 74th year.

Henderson.—On Oct. 21st, at Lynehurst, Worthing, Alexander Henderson, M.B., C.M.Edin., formerly of 21 Pitt Street, Edinburgh, after a long illness.

Holland.—On Oct. 26th, at Fairview, Amberley, Glos., Edward Wilmot Holland, B.A.Cantab., M.R.C.S., L.R.C.P.Lond., F.Z.S., third son of the late Rev. Edward Holland, M.A., Rector of Camerton, near Bath.

Laking.—On Oct. 22nd, suddenly, at 18 Cavendish Square, Eleanor Mary, the beloved wife of Sir Francis Laking.

Pope.—On Oct. 26th, at 4 Prebend Street, Leicester, Frank Montague Pope, M.D., F.R.C.P., son of the late Thomas Pope, of Harewoods, Bletchingley, Surrey, in his 57th year.

Wood.—On Oct. 22nd, at his residence, 53 Grosvenor Street, Chorlton-on-Medlock, Manchester, John William Atkinson Wood, M.R.C.S., L.R.C.P., eldest son of the late John Atkinson Wood, of Manchester.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

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NOTES AND COMMENTS.

Ireland and Mr. Lloyd George's Proposals.

WE publish in our correspondence column a letter from Dr. McGrath, of Dublin, with regard to the relation of Ireland to Mr. Lloyd George's recent proposals. The medical profession in Ireland is only indirectly affected by these offers, as the Insurance Act, as it stands, does not provide medical benefits for Ireland. There are signs, however, that the Irish party may before long demand the provision of medical benefits. There is no doubt that the benefit was excluded from the Act because it was thought that the friendly societies could make easy terms for administering benefits outside the Act. The societies have found, however, that medical men want fair rates, whether their service be given under the Act or outside it, and as a result those politicians who are most closely in touch with the friendly societes are beginning to think that they made a mistake in demanding the omission of the medical benefit for Ireland. However this may be, Dr. McGrath's suggestion is a good one. As soon as the decision of the profession in England on the Chancellor's proposals is known, the profession in Ireland must consider its position toward friendly society work outside the Act. This can best be done at such a meeting as he suggests, and we have no doubt that the matter will shortly be taken up by the Conjoint Committee representing the profession of Ireland.

The Hospitals and the Insurance Act.

So much prominence has been given to the position of general practitioners under the Act that the interests of the consultants and specialists have to a great extent been set aside. What is to become of our great hospital system under the National Insurance Act? First of all, there cannot fail to be a considerable reduction in hospital patients. Persons of the insured class are not likely to flock to hospitals in crowds as they now do if they can at any moment command gratis the services of a private medical man. That being the case how is the hospital medical staff to gain its experience? Then, again, the majority of honorary staffs have signed the Association pledge that they will not attend insured persons at hospital except on terms approved by the profession at large. There are a few—very few—members of hospital staffs who have refused to make this promise. Possibly they are looking out for governmental loaves and fishes as a reward for their disloyalty to their brethren. Anyway, in future life, they must look forward to nothing but contempt and ostracism. The practical question now before the consultants and specialists is whether the Government proposes to pay hospital medical staffs and to endow the general and special hospitals, or is our vast voluntary system to go by the board as part of the cost of Mr. Lloyd George's scheme?

What Manchester Says.

WE have received a long letter from the National Medical Union, which represents, primarily at any rate, that important factor, the views of the Manchester men. The main argument appears to be the little real value of the recent capitation fee of 8s. 6d. now offered by Mr. Lloyd George. The first deduction for drugs, instruments and appliances alone is estimated at 3s. 6d. per head, a sum that accords with a German experience extending over 25 years. Working out the rest of the figures the total is brought out by the Union as follows:—

	s.	d.
Drugs and appliances	3	6
Mileage	1	0
Medical benefit of non-residents ...	0	3
Operations	0	6
Consultations	0	3
Administration	0	3
Total deduction	5	9

If this be right there will be little left for ordinary attendance under the Act. The proposed supervision of medical men is dealt with thus:—"The disciplinary clauses of the Regulations are particularly objectionable to the medical profession. A tribunal called the 'Committee of Complaints,' predominantly composed of laymen, is set up, and the findings of this Committee are dealt with by the local Insurance Committees, composed of a still larger majority of laymen. It is to be hoped that every doctor will read and re-read the disciplinary regulations (Nos. 48 to 81 inclusive) and ask himself whether he is prepared, for the sake of settling this dispute, for the sake of preventing the launching of a public medical service, or for any reason at all, or in any circumstances whatever, to submit himself to such a condition of medical services."

Sewage Sludge Disposal.

So far as we are aware, a full technical description of Dr. J. Grossmann's process for the disposal of sewage sludge has not yet been published, but if the practical experiment on a big scale, which is to be carried out at Oldham, proves successful he will indeed have done the State some service. We are told that the process deals with the sludge in a hygienic manner, producing automatically within a small area dry manure and completely separating the grease and fatty substances. It is estimated that by this process about 1,000,000 tons of manure, at present running to waste, could be produced in this country, and 50,000 tons of phosphates, 50,000 tons of potash salts, and nitrogen equal to 100,000 tons of sulphate of ammonia taken back to the land. These constituents have an intrinsic value of about £2,500,000, and would be available for manuring at least 3,000,000 acres. The Oldham Town Council, representatives of a hard-headed Lancashire community, have proved their belief in Dr. Grossmann's process by providing at great cost the complete plant needed for treatment of the borough sewage. That fact alone inspires us with a confident hope that their confidence will be fully justified.

A Flaw in the Midwives Act. It would have been very wonderful if, unlike all the legislation of the kind in late years, the Midwives Act had not disclosed serious flaws as soon as it was put into full activity. A woman was summoned at Feltham last week for acting as a midwife for gain, she not being certified under the Act. She admitted acting, but said she had only done so in cases of emergency, which she was entitled to do under the Act. A discussion took place regarding the meaning of "emergency." Dr. C. W. F. Young, medical officer for the county, contended that the emergency ended immediately after the birth of the child. It was then the defendant's duty to instruct the husband or some other person that she could not undertake further responsibility unless a doctor were called in. She could, however, remain in attendance as a nurse. The Bench dismissed the summons, holding that the defendant had attended cases only in emergencies, and that after the birth of the child, she had become an ordinary nurse. If this is the correct interpretation of the Act, it will not need much ingenuity on the part of uncertificated women to evade its penalties with impunity, and to deprive poor women of the security the law was devised to provide.

Inoculation against Plague and Cholera. THE official reports for 1911 on plague in the Bombay Presidency, and on Cholera in Calcutta, exhibit striking statistics with regard to the efficacy of inoculation in these diseases. During the year the number of persons inoculated against plague was 93,655, as against 30,635 in 1910. Of this total 32,047 were inoculated in the Dharwar district, the worst affected in the Presidency. Eighty-one cases were reported among persons who had been inoculated, of which 38 proved fatal. But among the latter cases 36 were apparently in the incubation stage at the time of inoculation, the disease having been contracted before the serum had time to react. Of the remaining two cases, one developed plague after one month and the other after two months. As showing the relative immunity to plague of inoculated persons the following figures relating to the town of Bijapur, which were checked by the Civil Surgeon, are instructive: Among 2,742 inoculated there occurred 20 attacks with 3 deaths; among 30,258 uninoculated there occurred 1,695 attacks with 1,150 deaths. Similar comparative figures were reported from many towns and villages, the mortality being everywhere unmistakeably controlled by inoculation. In one village 75 per cent. of the population of 450 souls were inoculated. About two months later dead rats appeared, showing the presence of plague infection, but no cases of plague occurred. Cholera statistics from Calcutta likewise show striking results. In the Campbell Hospital 232 cholera cases were treated, a large number of them by Major Rogers' method, and no fewer than 141 recovered. Major Rogers, in charge of the Medical College Hospital, adopted his own treatment. Out of 136 in-patients 96 recovered, a percentage of 70.59.

LEADING ARTICLES.

THE NATIONAL INSURANCE ACT.

THE present situation of the medical profession with regard to the Insurance Act is more or less that of an army drawn up for the final shock of battle, to whom terms of settlement have suddenly been offered by the enemy. At any rate, the proposals of Mr. Lloyd George are now before us and it remains for medical men in all parts of the United Kingdom to decide whether those terms shall or shall not be accepted. Needless to remark, their decision is fraught with issues vital to the welfare not only of insurance doctors, but of all members of the profession. Fortunately, the British Medical Association presents an organisation available for obtaining a referendum from the medical men of the United Kingdom. Summonses have already been issued for early meetings all over the Kingdom, and the whole matter will be carefully discussed, point by point, before the local delegates are charged with the momentous decision to be recorded in the Representative Meeting. Meanwhile, it would be unwise to attempt any forecast of the result of the plebiscite, although it may nevertheless be permissible to offer a few general observations. One of the events of last week was the festival dinner of the Irish Medical Schools' and Graduates' Association, at which two important speeches were made upon the subject, and these will be found reported elsewhere in our present issue. The first was by Sir James Barr, President of the British Medical Association. His bitter hostility to the Act as "a wretched makeshift" was in no wise abated. His main argument was based upon the contention that "the service contemplated by the Act was the worst possible medical service that could be given." He maintained that the Act was framed on a charitable or a semi-charitable basis, inasmuch as it could be administered only by linking up with the charitable institutions, such as the hospitals and dispensaries. That phase of the question, in our opinion, has not been so far adequately grasped either by the profession or by the public. Such a medical service, with which we were threatened, said Sir James Barr, would be enormously costly, and if attempted by the State under present circumstances, would be supported only by the riff-raff of the profession. The other speech, that of Dr. Esmonde, M.P., was of value as it may fairly be assumed that it reflected more or less clearly the average Parliamentary views. His words conveyed a definite impression that the sympathies of the House were with the medical profession. At the same time he hinted that were Mr. Lloyd George's last concessions rejected, the goodwill of

Parliament might thereby be alienated. Dr. Esmonde's views are of special value as he has never hesitated to criticise the proposals of the Chancellor of the Exchequer on non-political grounds. He has had a prolonged experience of the difficulties of general practice, and it is a thousand pities that Mr. Lloyd George's policy was not based in the first instance upon practical guidance from sources of the kind rather than that of medical advice from men whose interest in actual practice is academic or from administrative bodies vitiated by a similar detachment. Dr. Esmonde commented on the possibility that failing agreement an attempt might be made to organise a modified State service in great cities, such as London, Liverpool and Manchester. That is the familiar policy of the thin end of the wedge, a favourite resort of the perplexed politician. Dr. Esmonde was emphatic on one point, namely, that under no conceivable circumstances would medical men submit to place their methods of practice under lay supervision or control. To that view we have no hesitation in according our strong assent, nor in advising medical men, whatever they may think of other proposals, to unite in rejecting any proposition of the kind with short shrift, or, better, with none at all. It is to be hoped devoutly that at the present juncture medical men will be practically unanimous in their decision for or against acceptance. Otherwise the medical profession will be riven asunder from one end to the other, and we may bid adieu for many a long day to the prospect of that abiding unity and organisation which alone can place our interests upon a secure and permanent foundation. In conclusion, we may quote the eloquent words of Sir James Barr:—"I want," he said, "the medical profession to study this matter and to see what is best for them, not merely in pounds, shillings and pence, but in upholding their own honour and dignity. I hope we shall arrive at a right decision. Medical men have been far too charitable in the past, and they are very charitable in the present. There is nothing that appeals to a medical man so much as suffering, and wherever he sees it he tries to relieve it. Whether or not this Act crumbles to the ground, as I hope it will, medical men will always continue to look after the poor, the destitute, and the suffering. The public may rest assured that medical attendance will be as good in the future, if the Bill goes to pieces, as it has been in the past, and that their interests are perfectly safe in our hands. We will work in the interests of the public, though we are not inclined to work very much for the Government."

CURRENT TOPICS.

The Mode of Infection in Poliomyelitis.

Since the announcement, in 1909, by Landsteiner and Popper, that poliomyelitis could be experimentally transmitted to monkeys, considerable activity has been shown with regard to the study of the ætiology of infantile paralysis. The parasite is a highly resistant one, being capable of surviving in dust, especially if enclosed in protein matter, for weeks and months, and in diffuse daylight indefinitely. In his address at Charing Cross Hospital last week, Professor Simon Flexner, Director of the Rockefeller Institute, New York, as Huxley Lecturer, advanced the view that the nasal mucous membrane was the site both of ingress and of egress of the virus in man, which ascended by the olfactory nerves to the brain, multiplied first in and about the olfactory lobes, and in time passed, as he believed, into the cerebrospinal fluid which carried it to all parts of the nervous organs. But the establishment of the respiratory avenue of entrance of the virus did not exclude all other modes of possible infection, and the preponderance of cases of poliomyelitis in the late summer and autumn months early suggested an insect carrier of the infection. House flies could act as passive contaminators, since the virus survived upon their body and within their gullet. So far it had not proved possible to infect the common varieties of mosquito, but in one instance infection had been produced in bed bugs which were made to feed on the blood of inoculated monkeys. The virus remained alive within these insects for many days, and the inoculation of monkeys with a filtrate prepared from them gave rise to characteristic paralysis and anatomical lesions. The result was significant, since it showed that insects were capable of taking up the virus from the blood where it existed in minimal quantities and of harbouring it for a considerable period in an active state; but it did not show that multiplication occurred within them or that in Nature they acted as the agents of inoculation. The employment of the immune serum, taken from monkeys or from human beings, exercised a definite, if not very strong, protective action on inoculated monkeys, but none of the sera could be regarded as having more than touched the fringe of the problem of a cure for the disease. As to the use of drugs, when the inoculation of virus and the administration of urotropin were begun together and the administration continued for some days afterwards, the development of the paralysis was sometimes, but not always, averted.

Laboratory Developments at Charing Cross Hospital.

The formal transference of the newly-provided laboratories for students of bacteriology and public health from the medical school of Charing Cross Hospital to the University of London took place last week. Now that the preliminary teaching formerly undertaken at Charing Cross has been transferred to King's College, the laboratories at Chandos Street have thus been set free, as it were, for the purpose of more advanced studies. These have now been altered and refitted to meet the needs, not only of systematic class-teaching for the Diploma of Public Health, but also of research and investigation work. They include a large class for laboratory research, professors' and lecturers laboratories for the departments of public health and bacteriology respectively, seven in number, preparation rooms, a large theatre, and a library for the joint use of the two departments. Particular attention has been paid to the lighting, which is a matter of no small importance to laboratory workers. The Dean of the Medical School, Dr. William Hunter, is to be heartily congratulated upon his energy and enterprise, for he has spared no pains to render the new department in every respect worthy of its new title of "University Laboratories in Public Health." The change thus effected marks another step in the development of the teaching of the University of London, in addition to the greater linking together of the work of medical students and post-graduates.

The Study of Medical History.

It cannot be said that the historical side of medicine has been unduly cultivated in this country. On the contrary, the subject of medical history, as such, is one to which the average medical practitioner, unless he be fond of antiquarian pursuits, is not specially attracted. The story of how some epoch-making medical discovery was made should, at least, be familiar to the medical student quite early in his career. Some attempt has been made of recent years by the establishment of the Fitzpatrick lectures at the Royal College of Physicians of London, to create an interest in the subject, and many valuable contributions to the literature have thus been made. The establishment of a Section of the Royal Society of Medicine for the Study of Medical History marks an appreciable advance in the study of this comparatively neglected aspect of medical science. The inaugural meeting will take place on Wednesday, November 20th, at 5 p.m. It is stated that the new Section already contains 128 members. One feature of the meetings will consist of exhibits by members from different parts of the country, and this should prove a popular innovation. It is also intended to develop an educational side through the medium of lectures by recognised authorities on the subject, open to all practitioners and medical students.

Genius and Drugs.

It is an old charge against men of genius that they are given not uncommonly to stimulating their faculties by the use of drugs. It has been too hastily assumed that such a habit was universal among men of genius. The physiological reason why the best, or, perhaps, the second best work, was produced by the help of drugs has not been clear, but in a recent article in the *Forum*, Dr. Reade, of the North Western University, supplies us with an answer. What is required for production of the best intellectual or moral work is "a systematisation of the personality." This in some cases may not accrue except as the result of an external stimulus. We all know cases where sudden and unexpected trouble or danger calls forth qualities previously unsuspected. The divergent impulses have been controlled and systematised. This is why in times of national stress, both the best and the worst phases of national life appear. The mere conventional becomes hidden by the individual qualities. In the absence of external stimulus a similar result may be produced by the use of one or other of the stimulant poisons. They have the power of enacting a harmony of the faculties. Different individuals find different drugs suit them best. Thus Dr. Johnson took tea, Voltaire coffee, Maeterlinck tobacco, Addison, Poe, and many others alcohol, Moreover, according to Dr. Reade, the stimulus of the pain of disease may bring about a similar harmony.

Tuberculosis and the Leading Hospitals.

In the organisation of the treatment of tuberculosis which is now proceeding all over the kingdom, there is some danger that the education of the practitioners of the future may be overlooked. The tendency is to shepherd all cases of tuberculosis occurring in the working classes to the special folds of the sanatorium and the dispensary. If this policy be pressed too far it may easily happen that medical students will be deprived of the opportunity of studying one of the most important diseases in its clinical aspects. It is not necessary to labour the point that without such opportunity the young doctor of the future will be insufficiently equipped to go among the public as a practitioner of medicine. No doubt, as at present, a number of patients suffering from tuberculous disease of one kind or another, will present themselves at the teaching hospitals. If, however, it became the custom to send on such cases at once to a special dispensary apart from the hospital, there will be a lack of the necessary clinical material. The easiest way out of the difficulty seems to be the attachment of tuberculosis dispensaries to the teaching hospitals. We do not, indeed, see why each general teaching hospital should not have as part of its out-patient equipment, a tuberculosis dispensary, recognised by and subsidised by the local health authority. In some instances it might be advisable to establish tuberculosis wards for in-patients, and, at any rate, provision should be made for the teaching of surgical tuberculosis.

Modern Isopathy.

The *Post-Graduate* publishes some interesting extracts from an isopathic catalogue issued under the date of 1886, prepared by one Dr. Samuel Swan. Hahnemann's reaction from the absurd, and sometimes disgusting, practices of his time was followed about 1840 by isopathy, an attempt to treat diseases "by the exhibition of their own morbid products." It is uncertain who was responsible for this offspring of homœopathy, but the remedies were triumphs of morbid ingenuity—discharges and excreta were ingested up to the coprophagous limit. The following are a few of Swan's "High Potencies, Morbific Products, Nosodes and other remedies":—Acarus; Scabies; Achrocordon Chococ. South American serpent, inveterate ulcers and sores; pains in scrofulous patients. Adenia; Glands from a case of Hodgkin's disease. Albuminuria; Renal Albumen; Anthracin; pus from a carbuncle; Blatta American (Cockroach); Bone Pus; Carcharadon Rondoletti; Chinese shark's oil. Too Choo's Balsam of shark's oil. Chinese remedy for deafness; Colastrom; Constipation of new born infant; Eel skin; Fel Gryllus Americana; Brazilian Cricket. Suppression of urine with or without pain. A boy who had chills and fever swallowed a live cricket and never had a chill afterward. Helix Tosta (Roasted Snail). Hæmorrhages from lungs and internal organs. Consumption: excellent. Lachryma Filia. Tears of a young girl in great grief and suffering. Protagon Humanum. From a dark complexioned man, aged forty-five, who had Bright's disease and Ascites. Pus from a Rectal Abscess. Sal cerebri. Salt secreted profusely from a gentleman's scalp with the perspiration, and on drying it was crystallised so heavily his head looked frosted. Vomito. Blood from a yellow fever patient while moribund. There were twenty-eight pages of this spelling, punctuation, and barbarous Latin. The virtue of these remedies is evidently transferable. "When a vial of medicine is nearly emptied, fill it with unmedicated pellets, and you will not have to purchase the remedy.

a second time." This catalogue was obtained quite recently from a leading homœopathic pharmacy in New York. It defies comment.

Death Attributed to a Patent Medicine.

Deaths directly attributable to secret remedies are extremely rare for the simple reason that these concoctions very seldom contain any potent agents. If a nostrum is to be passed off as a cure for disease, simple or grave, upon which the vendor is well aware it can have no effect whatever, he recognises as a rule that coloured water, coloured paraffin, or a dose of cheap purgative will answer his purpose better than any ingredient which whilst perhaps more costly might lead to a charge of manslaughter. An inquest was, however, reported last week, in which a fatal issue was determined by the use of a patent medicine known as Nicholl's Pain Cream. A child, aged 9, when ill was given by her mother several doses of this preparation, and afterwards she became worse and died two days later. The mother stated that she only gave the prescribed dose of five drops on four separate occasions, but it was alleged that she had made a statement to a witness that the dose given was half a teaspoonful. Medical evidence was given that death was due to an irritant poison. It was stated that the doses of five drops would not have been sufficient to cause the child's death, but the larger doses of half a teaspoonful might have produced a fatal result. The jury returned a verdict that death was occasioned or accelerated by use of the medicine mentioned, and they expressed the opinion that restrictions should be placed upon the sale of preparations of this character, and that they should not be obtainable from ordinary shopkeepers. Deaths indirectly due to the use of medicines are not uncommon. Such cases are known to every practitioner among the poor; and cases are to be found at times in the wards of every large hospital. These fatalities, as we have so often pointed out, are brought about by the advance of curable diseases into a mortal phase during the delay, whilst reliance is being placed in cures that are, to put it mildly, unknown quantities, administered, moreover, by persons who know nothing of the most difficult of all arts and sciences—medicine.

PERSONAL.

H.M. the King has granted his Royal licence and authority to Major H. Ensor, D.S.O., M.B., R.A.M.C., to accept and wear the decoration of the Imperial Ottoman Order of the Medjidieh (Third Class), which has been conferred upon him by the Khedive of Egypt, authorised by the Sultan of Turkey, in recognition of valuable services rendered by him.

Lieut. C. H. Smith, I.M.S., has been selected for appointment as a Specialist in Advanced Operative Surgery.

Dr. Frank George Bushnell, M.D.Lond., D.P.H., has been appointed Tuberculosis Officer to the Essex County Council.

Lieut. C. H. Stringer, R.A.M.C., has been appointed Medical Officer-in-Charge of Rollestone Camp, Salisbury Plain.

The name of Dr. A. M. Williamson has been added to the Commission of the Peace for the county and city of Edinburgh.

Mr. Claude H. G. Frankau, M.B., B.S.Lond., F.R.C.S., has been appointed Assistant Surgeon to St. George's Hospital.

Mr. Henry S. Souttar, M.A., M.B., B.Ch.Oxon., F.R.C.S., has been appointed Assistant Surgeon to the West London Hospital.

Dr. D. Murray Lyon, M.B., Ch.B.Edin., M.R.C.P. Edin., has been appointed Assistant Pathologist to the Edinburgh Royal Infirmary.

Sir Henry Craik was the chief guest last week of the Glasgow University Club at Manchester, under the presidency of Dr. A. Stewart.

Colonel E. H. Lynden-Bell, R.A.M.C., has taken up the appointment of Assistant Director of Medical Services in the London District.

Dr. H. Neville Crow has been appointed Honorary Surgeon to the Worcester Ophthalmic Hospital in place of Dr. Seymour, who has resigned.

Dr. T. Stacey Wilson has been elected President of the Birmingham Medical Mission in the place of Dr. T. E. Underhill, who has retired from this office.

Dr. Raymond Crawfurd will deliver the Fitzpatrick Lectures at the Royal College of Physicians of London during the present month.

Dr. C. J. Martin will deliver the Horace Dobell Lecture at the Royal College of Physicians of London on Thursday, November 21st, on "Insect Porters of Bacterial Infection."

Dr. H. P. Newsholme, M.B., B.Ch., B.Sc., M.R.C.P., D.P.H., has been appointed Assistant Medical Officer of Health and Assistant School Medical Officer, Southend-on-Sea.

Our sympathies are with Dr. Charles Mathias, of Tenby, who was shot on his own doorstep a week ago by a dastardly assailant, but we understand happily without any very serious results.

Dr. H. Colley March (Portesham), Dr. W. Burrough Cosens (Dorchester), and Dr. Peter William MacDonald (Dorchester) have been appointed Justices of the Peace for the county of Dorset.

The Weber-Parkes Prize of 150 guineas and medal has been awarded by the Royal College of Physicians of London, to John Alexander Douglas Radcliffe, M.B., B.Ch. Roy. Univ. of Ireland, Pathologist to the King Edward VII. Sanatorium, Midhurst.

Sir Christopher Nixon, Bart., M.D., LL.D., has been reappointed Vice-Chancellor of the National University of Ireland and Representative of the University on the General Medical Council, the tenure of office in both cases being for a period of three years.

Dr. H. McNaughton Jones presided at the annual festival dinner of the Irish Medical Schools and Graduates' Association, at the Hotel Cecil, on October 31st. He has occupied the presidential chair of that body for three years in succession, an honour not previously accorded to any occupant of that particular position. The chief speakers on that occasion were Sir James Barr and Dr. Esmonde, M.P.

A CLINICAL LECTURE

ON

JAUNDICE.

By W. LANGDON BROWN, M.D., F.R.C.P.,

Physician to the Metropolitan Hospital, and Medical Registrar to St. Bartholomew's Hospital.

FOR a long time cases of jaundice were divided into hæmatogenous and hepatogenous. In the latter group were placed those with a demonstrable obstruction to the bile ducts, while in the former were those in which no such obstruction could be found, and the condition was believed to depend upon a blood change. Such a view was very natural when it was known that the hæmatoidin of old blood clots was chemically identical with bilirubin, and that any drug which broke down red corpuscles caused jaundice. But then it was found that the same drug which caused hæmolysis also caused a catarrh of the smaller bile ducts, and if the liver were excluded from the circulation hæmoglobinuria resulted instead of jaundice. The jaundice was therefore really obstructive in nature, the situation of the obstruction merely being in the smaller instead of the larger ducts. Since those days, however, we have learnt of the existence of more subtle hæmolytic changes than those produced by drugs. Under a number of conditions hæmolysins are produced in the body which do not excite hepatic catarrh. The changes in extravasated blood which lead to the formation of hæmatoidin are brought about by this blood exciting the production of an antibody hæmolytic in its action. According to Troisier and Laroche, the hæmolysin acts by attaching itself to the extravasated corpuscle, altering its osmotic properties so that the hæmoglobin becomes extruded. A number of infective fevers and parasitic diseases apparently produce a similar condition in the blood. The presence of the malarial parasite in the red corpuscle might reasonably be expected to alter its osmotic state, and the occasional occurrence of jaundice in this disease is probably thus brought about. In the anæmia due to the presence of ankylostoma in the duodenum a hæmolytic jaundice occasionally occurs. The slight jaundice of secondary syphilis is of a similar type. Incidentally its occurrence may vitiate Wassermann's test, owing to hæmolysis occurring in all the tubes, as has happened in two cases under my own care. Some French observers place the jaundice of pneumonia and typhoid fever in this category. Jaundice is commonest in pneumonia, however, when it is the base of the right lung that is involved, which suggests a direct extension of the inflammatory process through the diaphragm, causing a catarrh of the smaller bile ducts. And as typhoid bacilli invariably ascend the common bile duct into the gall bladder it is only to be expected that they sometimes set up a cholangitis. It is indeed only surprising that they do not do so more frequently. We should require more evidence than is before us at present before accepting a hæmolysis as the explanation of jaundice in these diseases. The marked lemon tint of pernicious anæmia is, however, probably due to this cause, and the constant excess of urobilin in the urine points in the same direction. While severe jaundice in the newborn is generally due to septic infection from the umbilical cord or to pericellular cirrhosis of congenital syphilis, and exceptionally to atresia of the bile ducts, there is very often a slight transient jaundice which has been referred to hæmolysis. Before birth the fœtus has a polycythæmia, the average being 6½ millions per cmm. By the second day after birth this excess has disappeared and probably there will not be more than 4½ millions. In a sense the polycythæmia may be regarded as protective against the risks of birth, and the modern practice of waiting until as much as possible of the placental blood has entered the child's body before tying the umbilical cord may be regarded as tending to maintain the excess of corpuscles after the need for them has passed. Hæmolysis would therefore follow. This is not an argument against the practice, as the excess does no harm and the jaundice causes no inconvenience. According to other observers, however, no real difference can be detected in the blood counts, whether the cord is tied at once or when it has quite ceased pulsating. Thomson offers another ingenious explanation. During fœtal life the ductus venosus provides a short cut whereby the placental blood, coming from the umbilical vein can go direct into the inferior vena cava without passing through the liver. If it does not close immediately after birth, portal blood containing bile pigment absorbed from the intestinal meconium can pass direct into the general circulation. In support of this hypothesis it may be noted that transient jaundice is more common in premature children, where delay in closure might be expected. I have certainly found a patent ductus venosus in *post-mortem* examinations of premature children, but they have not always been jaundiced.

But the clearest, as it was the first established instance of a hæmolytic non-hepatic jaundice, is that called congenital family cholæmia or acholuric jaundice. The patient may be born jaundiced, but more commonly becomes so in the first few years of life. The jaundice persists with little or no variation for many years, but bile pigment is present in the stools as in health, while it is absent from the urine, in which any darkening is due to excess of urobilin. Nevertheless bile pigment is present in the serum. The spleen is always enlarged while the liver is not. There is considerable anæmia with a low colour index, poikilocytosis, nucleated red cells and reduction in the number of leucocytes. Yet the patient has fair or good health and shows a normal resistance to intercurrent diseases. The condition tends to appear in more than one member of the family and in successive generations. Some of the patients are liable to attacks of pain over the liver or spleen with slight pyrexia, during which the colour deepens. Alcohol and syphilis do not appear to take any part in its ætiology. Enlarged abdominal veins, ascites, œdema of the legs and hæmatemesis have never been recorded. Attacks of hæmoglobinuria have been noted, which could be induced by exposure to cold, and in this connection it is interesting that in one family a cold bath would intensify the jaundice. The most striking patho logical feature of the condition is the undue fragility of the red corpuscles, for they are hæmolysed by a dilute salt solution which has no effect on ordinary corpuscles. The French school have adduced experiments which seem to show that this undue fragility is due to the corpuscles having been sensitised by the adsorption of a toxin, but we are at present completely in the dark as to its nature.

We may sum up the characteristics of hæmolytic jaundice thus :—Though bile pigment is present in the serum it is only exceptionally present in the urine, and it is always present in the stools. Bile salts are not found in the blood, and, accordingly, there are not the bradycardia, the headache, depression and pruritus typical of obstructive jaundice. The corpuscles show diminished resistance to the action of salt solution compared with normal blood. Their fragility is further evidenced by their diminished numbers, their irregular forms, and in some cases their granular appearance.

It is one of the commonplaces of medicine that in the young adult obstructive jaundice is most often due to catarrh, in the middle-aged to gallstones, and in the old to malignant disease of the liver or the head of the pancreas. Here I wish to consider some of the features common to all forms of obstructive jaundice resulting from the alteration in the course of the bile, and to contrast these with hæmolytic jaundice.

Blood and Lymph.—It has been shown that when the bile duct is occluded the bile reaches the blood stream by way of the lymph. This may occur rapidly, for bile pigment may be found in the blood serum two hours after experimental ligature of the bile duct, and therefore much sooner than it appears in the conjunctiva or skin. Although bile salts have a solvent action on the lecithin and cholesterin of the red corpuscles *in vitro* the patient's own circulating corpuscles acquire a heightened resistance which increases with the intensity of the jaundice. This sharply differentiates such cases from hæmolytic jaundice. Though anæmia may result from the same cause of the jaundice, as in malignant disease of the liver, it is not a characteristic feature of other forms of obstruction to the bile duct. Occasionally small subcutaneous hæmorrhages may be seen, but they are usually produced by scratching excited by the pruritus or are really small telangiectases. As has already been said, the red corpuscles are more stable than normal, instead of being unduly fragile as in hæmolytic jaundice.

The Alimentary Canal.—We usually infer the existence of obstruction to the bile duct from the absence of pigment in the fæces and the cessation of obstruction by the return of the colour. But excess of the fat in the stools—*e.g.*, from pancreatic disease—may mask the presence of bile pigment. In many cases of jaundice extraction of the fæces with acid alcohol will show that pigment is present and therefore the obstruction is incomplete. This is more likely to be the case with gallstones than with new growth in the head of the pancreas, and may therefore be of diagnostic value. The amount of fat may be so great that the fæces float in water. An obvious amount of pigment in the fæces throughout suggests a toxæmic cause for the jaundice, in which there is no obstruction to the main duct.

The main digestive value of bile is in relation to the fats. The bile salts permit of closer contact between the watery digestive juices and oily fluids by lowering surface tension, while the lecithin and cholesterin help to dissolve fatty acids and soaps. Even in acid media the action continues because the bile acids which are now set free conjugate with fatty acids. Bile salts also play an important part in the absorption of fat by lowering surface tension. We can therefore determine in a case of fatty stools whether the pancreas or the bile is at fault. In normal fæces the saponified and unsaponified fats are approximately equal in amount. Now the pancreas provides for the fat-splitting that must precede saponification, so that if the excess of fat be due to a pancreatic defect, unsaponified fat will be in excess of the saponified. On the other hand, bile salts provide for the absorption of the fat already digested by the pancreatic juice, so that if there is loss of bile, the saponified fats will be in excess, because they cannot be adequately absorbed It is due to this difficulty in the absorption of fat that jaundice is so commonly associated with wasting, even when not due to a wasting disease like cancer. Theoretically it should be possible to counter-balance this by a liberal diet of carbo-hydrates, which can be digested and absorbed in the absence of bile. Practically, however, the accompanying digestive disturbance makes this difficult, so the patient is compelled to consume his tissue fat.

Bile is a natural laxative, as the bile salts stimulate the peristaltic movements. Jaundice is, therefore, apt to be accompanied by constipation. It is claimed that bile is antiseptic in its action, and it is certain that in its absence from the bowel there is excessive putrefaction as evinced by the rise of ethereal sulphates in the urine. But though free bile acids are antiseptic, bile salts are not. Bile cannot indeed keep itself from putrefaction, so that it cannot be regarded as an antiseptic. The explanation is that in the absence of bile salts the fats are so slowly absorbed that they coat over the proteins, which, therefore, undergo excessive bacterial decomposition instead of being quickly assimilated. The peculiar odour of the stools in jaundice is largely due to the higher fatty acids.

Hyperchlorhydria is a common accompaniment of jaundice, though not if there is also gastro-duodenal catarrh. Probably the hyperchlorhydria results from protective spasm of the pyloric sphincter, leading to retention of the gastric contents. It is, therefore, most likely to occur when the jaundice is associated with pain, as in gallstones, or with diseases of the pancreas, where the acid is inadequately neutralised by the alkaline pancreatic juice.

The Urine.—Bile pigment reaches the urine soon after its appearance in the blood, and before it can be detected in the conjunctiva. Naturally it disappears from the urine last as the jaundice clears up, since this is the way the body gets rid of it. The play of colours with fuming nitric acid is the best test, green being the most significant tint. Rosenbach's modification of Gmelin's test is the simplest; a piece of while filter paper is dipped in the urine and a drop of the acid is placed on it. The green colour obtained by the addition of tincture of iodine is not so sensitive. Bile salts may be found in the urine even before the pigment. Matthew Hay's test is the only one of any value for detecting them here. Flowers of sulphur poured on to the urine sink if bile salts are present, owing to the reduction of surface tension. But the majority of cases do not show bile salts in the urine. Some years ago I made a series of observations in the hope that their presence or absence would throw some light on the cause of the jaundice in different cases, but I found no help from this. The bile salts, which enter the bowel, are reabsorbed and used over again several times. Copeman's observations show that soon after a biliary fistula has been established the salts in the bile fall to one-tenth of the normal, since reabsorption cannot occur now. This suggests that normally bile salts are secreted and reabsorbed ten times before being used up.

Urobilin is absent from the urine in cases of complete obstruction of the bile ducts, as it is a reduction product formed by bacterial action on bile pigment in the bowel. If bile does not enter the intestine urobilin cannot be formed. When bile is again beginning to enter the intestine urobilin becomes abundant in the urine, probably because the excessive putrefaction going on in the intestine leads to its excessive formation. In obstructive jaundice, therefore, the occurrence of urobilinuria is often prognostic of subsidence of the jaundice. Indican is usually increased in the urine of jaundice since it results from intestinal putrefaction. A trace of albumen is frequently present also from irritation of the kidney by the bile, and this is accompanied by a relatively large number of yellow hyaline casts.

The Heart and Vessels.—One of the most definite results of jaundice is bradycardia. High tension usually accompanies a slow pulse, but in the bradycardia of jaundice the pressure is low and the pulse dicrotic. High tension stimulates the cardio-inhibitory centre in the medulla, and thus slows the heart through the vagus, but bile salts have a directly depressing effect on the heart. Hence the slow pulse with low blood-pressure. The blood pressure is also kept low by the toxic action of the bile salts on the smaller blood vessels producing some degree of vaso-motor paralysis.

The Central Nervous System.—Any severe toxæmic jaundice will be accompanied by marked nervous symptoms—headache, delirium and ultimately coma. But this is due to hepatic inadequacy and not to the presence of bile in the circulation. Indeed, bile salts are probably not produced in this condition, the liver being too damaged to elaborate them. A mild degree of poisoning of the nervous system by bile salts is, however, common in ordinary jaundice, causing depression and headache. Bile pigments and bile salts are usually found in the cerebro-spinal fluid removed by lumbar puncture.

The Skin.—Bile pigment appears in the skin soon after it does in the conjunctiva. It is well known that the lemon tint of pernicious anæmia can readily be distinguished from ordinary slight jaundice by the fact that the conjunctiva is not yellow but pearly white. If the lemon tint is produced by hæmolysis this difference in distribution is not easy to understand. In chronic jaundice flat nodules of xanthelasma are not uncommon. The production of subcutaneous hæmorrhages and telangiectases has already been alluded to. Pruritus is a most troublesome symptom, but it is inconstant. It is most likely to develop in cases of jaundice with sudden onset. It bears no relation to the severity of the jaundice, but may come on in the late stages of protracted cases. Pruritus is to be attributed to the bile salts. The patient indulges in much scratching, but without relief, for, as he often says, the itching is *beneath* the skin. Gilbert and Herscher found that thyroid extract inhibits or diminishes the formation of bile salts, and I have confirmed this both experimentally and clinically. I have found it decidedly useful for the relief of pruritus.

The Secretions.—Saliva, tears, and milk are not bile-stained. It is quite exceptional for the sweat to be thus stained, despite frequent statements to the contrary. The copious diaphoresis induced by pilocarpin is, however, accompanied by bile pigment. Nasal and bronchial mucus is not tinged with bile. Inflammatory and passive exudates, on the other hand, are invariably bile-stained. Thus if mastitis occurs in jaundice, milk would be coloured with bile. Again, although the expectoration in bronchitis is not coloured, if pneumonia or œdema of the lung occurs, bile at once appears in the sputa. In a case of jaundice without pneumonia, then, the occurrence of bile-stained sputa is of serious import, being evidence of heart failure. Fluid in the pleural or peritoneal cavity, being either the result of inflammation or of passive exudation will accordingly be coloured by bile in a jaundiced patient.

It will be observed that apart from an unpleasant but harmless discoloration produced by bile pigment, all the important symptoms in jaundice are due to bile salts. Their absence from the intestine causes steatorrhœa and wasting from deficient absorption of fats, increased intestinal putrefaction and constipation. Their presence in the blood causes bradycardia, headache, depression, pruritus, and sometimes subcutaneous hæmorrhages.

In conclusion we may note that obstructive jaundice is sharply distinguished from hæmolytic jaundice of the type described in the earlier part of this lecture by the presence of these symptoms of the perverted course of the bile salts and by the normal or heightened resistance of the red corpuscles. When the obstruction is complete there is of course the additional diagnostic feature of clay-coloured stools. But this will be lacking if the obstruction is partial or passing off, although the patient will still be jaundiced.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Professor Hutinel, M.D., of the Faculty of Medicine of Paris; Physician to the Hopital des Enfants Malades. Subject: "The Early Symptoms of Tuberculous Meningitis."*

ORIGINAL PAPERS.

A NOTE ON INJURIES AT OR NEAR THE ANKLE.

By J. JACKSON CLARKE, M.B., F.R.C.S.,
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A great number of injuries important clinically occur in the neighbourhood of the ankle-joint. Since the introduction of radiography sixteen years ago some of these conditions have come to be understood better than they were formerly, and no one worker has contributed more to the surgery of this region than Etienne Destot, of Lyons, in his book, "Traumatismes du Pied et Rayons X."

The salient anatomical and physiological features of the region should be clearly borne in mind. No common injury demands of the practitioner more care in diagnosis than a case of recent injury in the neighbourhood of the ankle-joint. The patient may be seen immediately before swelling has occurred, or when swelling has obscured the anatomical landmarks. The swelling may extend from the mid-tarsal region to the middle of the leg. A history of the accident, whether the injury was caused by a fall on the foot in a position of flexion or extension, or whether the foot was turned forcibly outwards or inwards, or subjected to a direct crushing, such history may guide the course of clinical examination; careful palpation, tapping at various spots for loose fragments (*toucher du piano*), tapping the heel to find whether there is effusion into the ankle as indicated by an *astragalar shock*, akin to the *patellar shock* in knee-joint effusion. All these and other points of clinical examination should be carefully carried out, and also in every case, without exception, the patient should be advised to have a skiagram taken without delay.

It cannot but be useful to recall the various possible injuries in this region beginning at the lower extremities of the tibia and fibula and ceasing at the transverse tarsal joint.

The following groups of injuries require notice:—

1.—Supra-malleolar fractures of tibia or fibula or both, separation of lower epiphysis of the tibia.

2.—Sprains of the ankle.

3.—Dislocations of the ankle.

4.—Malleolar fractures, including Pott's fracture; separation of lower fibular epiphysis.

5.—Fractures of the lower articular surface of the tibia.

6.—Fractures and dislocations of the astragalus.

7.—Fractures of the os calcis.

8.—Sub-astragalar sprain, and sub-astragalar dislocation.

9.—Fractures and dislocation of the scaphoid.

10.—Dislocation at the transverse tarsal joint.

The importance of comparing all the varied conditions that fall into the above categories is not in doubt. What appears to be a simple fracture of the external malleolus may be but the less serious part of an injury involving a fracture of the astragalus of a kind which demands operative treatment, or a fracture of the os calcis such as entails a certain amount of permanent weakness for which the patient will blame the doctor if due warning is not given at the commencement of treatment. Nor is it sufficient to study merely the results of injury. The common spontaneous flat-foot is closely imitated by the results of injury to the ankle or to the posterior tarsus and must be considered with them.

The anatomy of the parts is so important that it is necessary to have the bones before one as one reads. The lower ends of the tibia and fibula should be fitted together, and note should be taken of the form of their corresponding astragalar articular surfaces; the large buttress of bone, posterior apophysis, that supports the long low hinder lip of the inferior tibial surface; the bimalleolar axis with its 30 degrees of obliquity—the outer malleolus being so far behind the inner; of these among other points concerning the lower end of the leg bones. The ligaments which bind and the tendons which support and move the bones must all be kept in mind as well as the mechanics, static and dynamic, of the region. At the ankle-joint the bones subserve two separate functions: first, that of sustentation, or transmitting the weight of the body to points of the astragalus, which vary according to whether the foot is at right angles with the leg in the plantigrade position or plantar-flexed (digitigrade or equinus position) or dorsal-flexed (calcaneus position): second, that of maintaining a certain direction of the foot, by reason of the astragalus fitting between the two malleoli as in a mortise. The second function is subservient to the first, but from the point of view of treatment the two must be thought of separately.

The astragalus plays the chief part in determining the majority of the injuries under consideration. The upper aspect of its body forms the quadrant of a pulley-like surface; whilst below it is closely bound to that most important bone of the tarsus, the os calcis by the interosseous ligament. These two bones form the posterior section of the tarsus. Together with the os calcis the scaphoid and the inferior calcaneo-scaphoid complete the bed of the astragalus.

The main groups of injuries may now be considered.

Group 1.—Supra-malleolar Fractures.—Fractures of one or both leg bones immediately above but not involving the ankle-joint owe their importance to the danger of ankylosis. The lower epiphysis of the tibia being extra-articular, cases of its separation also belong to this group. Treatment is the same as in other cases of fracture of the shafts of the leg bones, but in this region it is important to secure a good apposition of the fragments and, by massage and movements, unimpaired function. If it should be found to be impossible to obtain good apposition, often operation is called for.

Group 2.—Sprains of the Ankles.—These are injuries to the ligaments or other soft parts without fixed deformity. Radiography has shown that in many cases which appear clinically to be simple sprains of the ankle, bone lesions may be found—*e.g.*, incomplete fracture of the fibula, separation of the tip of the external malleolus, fracture of one or other malleolus, usually the external one, of the anterior border of the inferior tibia at the inferior tibia-fibular joint. Therefore a skiagram should be taken in every case.

The simplest treatment of a sprained ankle is that described by Wharton Hood: The application of a rather stiff slighty adhesive plaster (*a*) next the skin, and outside this a series of strips of adhesive rubber plaster overlapping one another from above down to render centripetal massage easy. None of the strapping is to be applied tightly but just comfortably, and renewed as the subsidence of swelling requires. Walking is resumed at once, but in cases where there is reason to think serious ligaments may have been ruptured, an outside iron and inside T-strap should be worn before walking is allowed. Wharton Hood, "Treatment of Injuries." 1912.

Group 3.—Pure dislocations of the foot can only occur in two directions, forwards or backwards; either may be *complete* or *incomplete*, according as the trochlear surface of the astragalus completely leaves that of the tibia or not. For reduction the patient lies on the back with hip and knee-joints bent, the limbs being firmly held below the knee, while the operator manipulates the foot. Division of the tendon of Achilles may be required in forward dislocations.

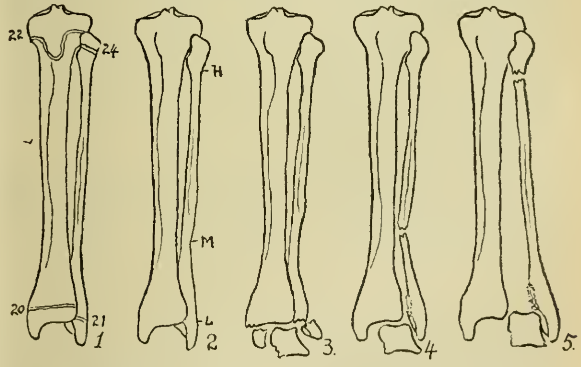

Fig. 1.—Schematic representation of the classical fractures of the fibula, accompanied by partial or total dislocation of the foot outwards. (1) Normal bones, showing epiphyseal lines and the ages at which they disappear; (2) normal bones, H, high; M, median; L, low fracture sites of fibula; (3) bi-malleolar fracture; (4) fracture of the shaft of the fibula and either fracture of the internal malleolus or rupture of the internal lateral ligament of the ankle-joint: Pott's fracture; (5) fracture of the fibula near its upper end from complete outward displacement of the foot: Maisonneuve's fracture.

(*a*) These plasters are supplied by Fitch and Ibbotson, 2, Lower Seymour Street, W.

Group 4.—Malleolar fractures, including Pott's fracture and separation of the lower fibular epiphysis. These may be divided into two classes: Class 1.—Fractures without displacement of the foot occur more commonly than is supposed; many severe and some simple sprains involve incomplete fracture of the lower part of the fibula or separation of the tip of one or other malleolus. A special fracture is that described by Wagstaff, in which the anterior margin of the surface of the fibula which articulates with the tibia is separated. The inferior tibio-fibular ligament may be torn without any bone being fractured. This injury is produced by a diastasis—*i.e.*, a temporary dislocation which rights itself. It is to be remembered that a fracture of the fibula with the concomitant injury to the parts at the inner side of the ankle characteristic of Pott's fracture may be present without the corresponding deformity, the subluxation of the ankle having righted itself.

Class 2.—Malleolar fractures with displacement of the foot, see Fig. 1, which shows types of malleolar fractures classified according as different parts of the fibula are involved.

(*a*) The usual definitions as given in English works are as follows:—

What we call a Pott's fracture is called a fracture of Dupuytren type by Destot. Pott's description of the fracture associated with his name was published in 1775—"Chirurgical Works of Percival Pott." The late Mr. Pickering Pick, "Fracture and Dislocations," 1885, refers to the English conception of Dupuytren's fracture to a description of a case in the Hôtel Dieu in 1816. The exact lesion appears to have been conjectured only: "The fibula is fractured, and the tibio-fibular ligaments torn through; or what is more probable, a small portion of the tibia into which these ligaments are attached broken off, etc." In Dupuytren's "Injuries and Diseases of Bones" the chief stress is laid on typical cases of Pott's fracture. Now we are able by means of the X-rays to make an "Autopsie vivante," and definite anatomical diagnosis is possible, I think it will be an advantage to give up the term "Dupuytren's fracture" and also as far as possible descriptive names for those that may be termed monumental.

Pott's Fracture.—The fibula in this injury is broken about 3½ inches above the top of the malleolus. The foot is displaced outwards and backwards, and the heel is drawn upwards. This threefold displacement is a necessary part of a Pott's fracture. The foot may be everted to 90 degrees, but the degree of displacement is no guide as to prognosis. This displacement is only made possible either by laceration of the internal lateral ligament or separation of the internal malleolus; and to allow of the outward displacement some degree of laceration and stretching of the inferior tibio-fibular ligaments must take place. An oblique fracture of the external malleolus causes a deformity similar to that of Pott's fracture. Fractures of this type are not uncommonly compound; the soft parts over the inner side of the joint yielding either to stretching or to external pressure. Treatment of malleolar fractures consists first in reducing the deformity completely, whether by massage or under anæsthesia, and adopting some form of splint to maintain the correction, a back splint with footpiece at right angles and side splints properly applied after complete correction of the deformity will be found to be most generally useful. In practised hands the double houseflannel and plaster of Paris (Croft's) splint may be used. Early massage and movement are essential.

Flat-foot, after Pott's fracture, (*a*) may be of the ordinary kind caused by muscular weakness, but it is very often an expression of imperfect reduction of the dislocation. Where union has taken place in a bad position operative treatment alone can correct the deformity. Early ambulant treatment may be allowed if the proper steel support is used. This is an external steel support with an internal T-strap and a valgus pad in the boot being the most effectual treatment for the flat-foot. It can be made and adapted to any boot in a few hours.

Open operation is required when the deformity cannot be completely removed under anæsthesia, and also in compound fractures. Efficient drainage is important in the latter.

Group 5.—Fractures which involve the inferior articular surface of the tibia, the weight-bearing part of the bone: Class 1, Bimalleolar fractures with fracture of the posterior margin of the inferior tibial surface; 1a, Isolated fracture of the inferior tibial surface (Meissner). Class 2. Fracture of anterior margin of tibia. Class 3. Various multiple fractures of the lower surface of the tibia.

These are very serious injuries and demand open operation of some sort. Astragalectomy is recommended by Destot in Class 1, and I have found it necessary in one such case. A perfect ankle cannot be expected after any of these accidents.

(To be continued.)

THE TREATMENT OF PSORIASIS.

By DRS. BROCQ AND SIMON.

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[Specially Reported for this Journal.]

Psoriasis is the name given to an affection of the skin which is not, as a rule, attended by itching. It makes its appearance in successive outbursts and is characterised by circumscribed patches of a more or less bright red colour, covered with pearly scales, usually thicker at the centre than towards the periphery. When we scrape a patch we remove, easily or with some trouble, successive layers of white, pearly, stratified scales until ultimately we perceive the pink colour of the subjacent tissues. If we go on scraping gently we finish by raising a sort of fine pellicle which comes away in comparatively large pieces and beneath this is the red, smooth, shiny, often rather moist, dermic surface on which soon appear fine droplets of pure blood. It is only after carrying out this exploratory scraping that we can be sure we are dealing with a case of psoriasis.

The clinical forms of psoriasis are rather variable; according to the extent and shape of the elements they are known as *psoriasis guttata*, *nummulata*, *punctata*, gyrata, figurata, &c. Its

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(*a*) Various terms are used to explain the inverted and everted positions of the foot. If the foot is compared with the hand eversion corresponds with pronation, thus the everted foot is often called the pronated and the inverted the supinated foot. The terms adduction and abduction are also used for the same movements, as far as they are carried out at the subastragalar and medio-tarsal joints, but there is no pure movement of adduction or abduction, since the movement between the astragalus and os calcis is a rotary one on an axis passing from the upper and inner part of the head of the astragalus downward and outward to the outer tuberosity of the os calcis. It comprises at least two-thirds of the whole movement. Part of the inversion-eversion movement takes place at the ankle joint, and, owing to the form of the tibio-fibular mortice, this movement, as one can easily see in one's own foot, is more free in the ventro-flexed position. It is of practical importance to remember that when the knee is extended, the normal ankle should be capable of 22 degs. of dorsal and at least 45 degs. of ventral flexion.

(*a*) The eversion of the foot in such cases is due to the external malleolus being tilted outwards and the astragalus following it. This is not ordinary flat-foot, which is a sublimation of the astragalo-scaphoid and other tarsal joints.

favourite site is the elbow or rather the upper posterior aspects of the forearm, the knees and the scalp. The last-named is characterised by fine scales or, more commonly, by stratified collections of epidermis running through the still healthy hair, giving rise to typical ridges.

We also get it on the face, the prepuce, the glans, the palms of the hands and the soles of the feet, where it may be difficult to distinguish the eruption from psoriasiform syphilides. On the nails we get typical yellow stains, detachment of the nails and cupuliform erosions. It is not uncommon for psoriasis to accompany deforming progressive arthropathies (arthropathic psoriasis.) In nervous and intoxicated subjects there may be itching.

INTERNAL TREATMENT.—(1) Good hygiene, bodily exercise and perspiration. (2) Same dietary as for gouty arthritics; in the subjects of pruriginous psoriasis forbid alcohol, coffee, tea, &c. Apart from any other treatment strict vegetarian diet often yields surprising results. (3) No remedy yet known yields constant results in psoriasis. Sometimes arsenic, taken in large doses over a long period, causes the eruption to disappear, so does iodide of potassium. Mercury proves successful in the arthropathic form. Balsams, *e.g.*, tolu, copaiba, sandalwood oil, turpentine and so on, sometimes appear to promote the subsidence of the attack. In some instances thyroid extract exerts a marked, direct action on the patches.

LOCAL TREATMENT.—I. (A) Inflamed Psoriasis.—Avoid using any irritating substance. (1) Starch or gelatine baths every day or every other day at the temperature of the body, lasting 20 minutes. Dress the patches immediately after the bath. (2) On the spots most affected, especially if they weep, apply cold potato poultices or cover with rubber tissue or with lint steeped in camomile water and covered with protective. (3) Morning and evening rub the whole body with freshly-prepared lard, vaseline, glycerole of starch, cod-liver oil or oxide of zinc ointment. (4) As the irritation of the skin subsides try and get the patient to use benzo-naphthol ointment, made progressively stronger, beginning with 1 in 40.

(B) Non-Inflamed Psoriasis. *Take the case of a patient with a copious eruption who for any reason cannot remain under close observation but who can spare the time to attend to himself.* In such a case prescribe preparations containing tar or oil of cade. (1) Every day to take a sulphur or alkaline bath during which the patches are well-rubbed with tar or salicylic soap so as to get rid of the scales. If no bath be available scrub the whole body vigorously every evening with hot boiled water and soap. (2) Directly after the bath rub the following ointment energetically into the patches:—Cade oil, 100 parts; soft soap, q.s. to emulsify the oil, glyceride of starch, 94 parts; salicylic acid, 3 parts; essence of cloves, 10 parts. Should this ointment cause inflammation, we have only to reduce the proportions of oil of cade and salicylic acid. (3) When the ointment has been applied, the patient puts on flannel combinations which absorb the oil of cade over the sites of the patches. This is worn throughout the treatment so as to keep the parts in a perpetual bath of oil of cade. (4) If the patient is engaged during the day these applications are only made at night. In the morning he washes all over with a scented soap of some kind and applies a little salicylic ointment to the patches. (5) Should cadic acne supervene we must suspend the treatment, giving starch baths and applying sedative ointments until the inflammation has subsided, then recommence the treatment.

II.—*The patient has a copious eruption of psoriasis and cannot be kept under observation by the physician and for special reasons cannot make use of smelly ointments.*—(1) Take every other day a simple or sulphurous bath in which the patches are scrubbed clean with tar or salicylic soap, soap well all over every night. (2) Every night, on going to bed, apply a salicylated pyrogallic ointment but proceed cautiously, looking out for darkening of the urine. Begin with an ointment containing eight grains of salicylic acid and sixteen grains of pyrogallic acid in ten drachms of vaseline and apply this only on one limb for example. If it be well borne its use may be extended and the proportion of salicylic acid increased to 1 in 10. As pyrogallic acid stains the hair we must use mercurial ointments in light-haired persons with psoriasis of the scalp. (3) If pyrogallic acid does no good, try calomel ointment, 1 in 50, gradually increased to 1 in 20, or the ointment of the yellow oxide of mercury. Be on the look-out for salivation and only apply it over limited areas. (4) We may also try sublimate baths (10 to 20 grammes to each bath). (5) Should these measures for any reason be inapplicable, revert to the naphthol preparations, 2 in 10, and salicylic acid 1 in 75.

III.—*The patient cannot keep in touch with the doctor but has only a few patches of psoriasis.*—(1) For psoriasis of the scalp prescribe a mercurial ointment (yellow oxide, for instance). The patches must be washed from time to time with Panama wood or tar soap, then rub the patches gently with the ointment. (2) For the body we may prescribe mercurial or cade oil ointments containing 1 in 20 of the yellow oxide instead of salicylic acid, but it is always preferable to have recourse to medicated collodion or traumaticine or medicated plasters (*e.g.*, oil of cade, calomel, pyrogallic acid, &c., plasters). The patch is carefully scraped clean, then a piece of plaster rather larger than the patch is placed in apposition and left on for 24 hours. The plaster is then removed and the spot cleansed with a plug of cotton steeped in ether; wash with soap and hot water, then renew the application.

IV.—*The patient can remain under observation.*—Of all the topics actually known the best is unquestionably chrysarobin or chrysophanic acid. The drawback to its use is its liability to set up very violent irritation, generalised erythema and other symptoms of intoxication. Its use must therefore be closely watched. (1) It should not be used to the scalp, mercurial ointments being used instead (*vide supra*). (2) Cleanse the patches now and then, removing the scales, by baths and soaping. (3) To one or two patches a day apply an ointment containing 1 part of chrysophanic acid, .75 part of salicylic acid and pure vaseline 40 parts. Gradually extend the area of application and increase the proportion of chrysophanic acid to from 1 to 30 to 1 in 10 and even 1 in 5. (4) Should the acid not be tolerated have recourse to pyrogallic acid (*vide supra*), to mercurial preparations, or, as a last resort, to oil of cade, pure or mixed with the yellow oxide of mercury.

In the treatment of psoriasis we must push it until the eruption has completely disappeared and there remains not the faintest trace, otherwise speedy relapse is probable.

Much has been written of late about the effects of the X-rays and radium on patches of psoriasis. Unquestionably these agents cause the patches to disappear, but recurrence is the rule unless the exposure has been such as to determine atrophy, but this exposes the patient to the risk of radio-dermatitis or subsequent telangiectases which, when situated on the chest, back or arms in women, would then have to be treated by electrolysis.

THE MODERN COMBAT AGAINST TUBERCULOSIS AMONGST CHILDREN (a)

By PROFESSOR NIETNER,

Of Berlin.

THE council and staff of the Royal Hospital for Diseases of the Chest recognise their duty as a special hospital for diseases of the chest to provide training for medical officers of tuberculosis dispensaries and sanatoria, and more specially for general practitioners, and through the generosity of one who fully realises the great value at this juncture of affording facilities for such training they have been able to build an entirely new outpatient department equipped with all details for research work and scientific instruction on modern lines, and with special accommodation for a tuberculosis dispensary. But it is not only hoped to constitute the hospital as a training centre for those who wish to qualify themselves for dispensary and sanatorium appointments but also as a special training centre for tuberculosis nurses. In Germany it has long been recognised that efficient training is indispensable for the domiciliary work connected with the dispensary system, above all, training in the collection and interpretation of data. The properly trained observer can be relied upon to procure the right sort of information, and this will conduce to promote economy, both of financial expenditure and of effort. Arrangements are being made to receive nurses for two years' training or for shorter courses of post-graduate teaching.

In these circumstances it was held that no one could be better fitted to give the inaugural lecture than Professor Nietner, who is the general secretary of the German Central Committee for the Prevention of Tuberculosis. This great society was founded in 1895 by the Reichs Kanzler of that day, Fürst Hohenlohe. It was designed to link up all schemes and associations throughout the German Empire which have as their object the prevention of tuberculosis. The President is the State Secretary of the Interior for the time being. The council includes representatives from the Federal States, the Imperial Board of Health and the Imperial Insurance Board, as well as a number of high officials and medical experts. The Central Committee co-operates closely with the various great invalidity insurance institutions who liberally support such local organisations as bid fair to prevent permanent ill-health. The State gives a yearly grant of £3,000. The working of the Central Committee presents an admirable object lesson in organisation and the avoidance of over-lapping, and the Central Bureau in Berlin is visited by interested inquirers coming from almost every European State, from English Colonies and from America. It is the arduous duty of the General Secretary to travel throughout the Empire in an advisory capacity, and all new local schemes and associations are carefully studied by him. In his remarks on the modern combat against tuberculosis amongst children Professor Nietner stated that when the Central Committee was first established its efforts were mainly directed to the care for the still curable cases, the means for so doing being amply provided by the Invalidity Insurance Institutions. But latterly the trend has become ever stronger towards prophylaxis. It is now also realised that prevention must begin with the child. This truth was practically ignored during the earlier history of the campaign against tuberculosis in Germany, partly owing to the fact that little was definitely known about the incidence of this disease in childhood, while the latent tuberculosis of infancy was almost an unknown factor. Kirchner, in Germany, first pointed out that though the incidence of tuberculosis amongst adults is steadily decreasing in Germany, the children of the nation do not participate in this decrease.

The researches of the last ten years have brought to light facts that point to the conclusion that in a very large majority of cases infection occurs during childhood, and, indeed, in the first years of life. Hamburger declares that 90 per cent. of all children up to the completed 12th year are infected. Schlossman has gone so far as to say that tuberculosis is a true children's disease, is acquired during childhood and most be prevented, treated and healed during childhood. The fact stands beyond a doubt that in by far the greater number of cases the source of infection can be traced to the human subject suffering from "open" tuberculosis and that infection is acquired through the close intercourse resulting from family life within the walls of the home. Only those preventive measures can, therefore, hope for success which take this fact consistently into account. But to prevent the child from becoming infected in his own home environment without weakening those family ties and responsibilities which are so essential to the moral health and true happiness of the nation offers a social problem of the utmost complexity. Professor Nietner himself deprecates drastic schemes for completely separating the child from his family, though every care should be taken to safeguard it in its own home. Professor Nietner denied that tuberculosis was a "school disease," and maintained that the school could not justly be held responsible for the spread of infection. He attaches the utmost importance to the careful organisation of the school medical service in the battle against tuberculosis, and said that to the school doctor alone was the power given to prevent latent tuberculosis developing into active disease in the children examined by him and kept under his watchful supervision. He said that with a complete State organisation of school medical supervision the discovery and recovery should be possible of a large number of children who might otherwise become later on a serious strain on the economic resources of the national through developing active tuberculosis during the wage-earning period of life. Germany can boast of a very large number of agencies for promoting the health and welfare of children, and these are closely linked with the school medical service. In the sanatoria for children the practice of imparting some school teaching is rapidly gaining ground. Finally, Professor Nietner attached great value to the use of tuberculin in the treatment of tuberculous children and claims good results from it if properly administered.

(a) Abstract of Inaugural address delivered before the New Medical School of the Royal Hospital for diseases of the Chest, City Road, London, E.

OPERATING THEATRES.

WEST LONDON HOSPITAL.

Abdomino-perinæal Excision of the Rectum for Carcinoma.—Mr. Aslett Baldwin operated on a man, æt. 60, who had been admitted for carcinoma of the rectum, which could be felt above the sphincters. There was a history of the passage of mucus and blood for a considerable time. The patient complained very much of diarrhœa, which was much worse in the morning; many times it was mainly mucus that was passed.

After the skin over the abdomen had been sterilised by washing with acetone and painting with tincture of iodine some hours before the operation, the iodine being also painted on immediately before the operation, an incision was made over the middle of the left rectus muscle at its lower end, the sheath was opened, the muscle displaced outwards, and the abdomen opened. The hand was introduced, when it was found that the growth extended higher up than had been ascertained by examination from below, but it was quite movable. Some glands in the hollow of the sacrum were enlarged, but the liver appeared to be free from growth. The patient was now placed in the Trendelenburg position, and the centre of the sigmoid loop then drawn out of the abdomen; intestinal clamps were applied after the intestines had been carefully packed round with gauze, and the bowel and mesentery were divided between the clamps. The divided ends were wiped with swabs and painted over with pure carbolic. The two ends were then completely closed by two layers of continuous sutures; the first suture passed through all the coats, this being buried by a second suture passing through the peritoneal and muscular coats. Another incision was now made through the skin about two inches internal to the left anterior superior spine, the muscles were split in the direction of their fibres, the transversalis fascia was divided, and the peritoneum again opened. The upper closed end of the sigmoid was passed out through this opening and sutured into position to form a permanent colostomy; but the bowel was not opened. The small intestines were now drawn up from the pelvis, packed into the upper part of the abdomen and kept there by an abdominal cloth held in position by an assistant. An incision was next made with scissors through the peritoneum on each side of the bowel to be removed extending downwards to the bottom of the pelvis. The lower ends of these incisions were joined by one which passed between the rectum and bladder, for which very long scissors had to be used. The mesentery opposite the divided bowel was then cut through with scissors, and the superior hæmorrhoidal artery ligatured. The bowel below this and its mesentery and the tissues between the bowel and the sacrum were now peeled down as far as the lower part of the pelvis, thus taking bowel and enlarged glands, etc., down in one piece, which was then pushed to the bottom of the pelvis. The divided peritoneum was next brought together from below upwards by a continuous suture of iodine formaline catgut made to resist absorption in muscle for three weeks; thus the lower part of the peritoneum was closed above the bowel to be removed. The abdominal cloth was then removed and the abdomen closed in layers.

The patient was turned into the left lateral position. The anus was painted over with pure carbolic acid, and was completely closed with a continuous thread suture. Incisions were made round the anus and the gut separated in front and at the sides, and after working up a short distance posteriorly the bowel was found to be completely free and was removed. The deeper parts of the wound were brought together as much as possible with buried iodine catgut sutures. The skin was closed with silkworm gut sutures, excepting where the drainage tube was inserted.

During the whole of the operation saline solution was run into each side of the chest by means of two large hollow needles.

Mr. Baldwin said he had preferred to displace the rectus muscle outwards in opening the abdomen because this method did not interfere with its nerve supply, nor was there risk of injuring the deep epigastric vessels. Some people, he remarked, advocated the operation he had just performed in every case of carcinoma of the rectum, and no doubt in many cases he thought it gave the best prospect of permanent cure; but whenever possible and safe he always aimed at preserving the normal anus, for a colostomy is to some persons a great nuisance. The ideal operation, he considered, was to bring healthy bowel down through the sphincters and attach it to the skin after having removed the mucous lining of the sphincters. When this is not possible, an end-to-end anastomosis may be done several inches above the sphincters after the coccyx has been removed and, if necessary, the lower part of the sacrum. The disadvantage of this is that the posterior sutures very often give way, and a fæcal fistula results, but this in time usually closes without further trouble; also some degree of stricture sometimes results at the site of anastomosis, which may require dilatation with bougies for a time. The objection to making the artificial anus at the upper end of the sacral incision is that the fæces are often projected backwards instead of downwards, and the situation of the artificial anus is difficult for the patient to attend to conveniently, but it has this advantage, that sometimes the upper bowel subsequently prolapses to a certain extent, and it may be possible later on, by a second operation, to join it after this has occurred to the lower end, provided sufficient has been left, and thus restore the continuity of the bowel and bring the normal anus into use again. The reason why none of these methods were adopted in this instance was that the growth was too near the sphincters to make it safe to leave them, and a posterior anus without sphincters is much less under control than one in the inguinal region.

If the patient remained comfortable the colostomy would not be opened for about three days, so as to get the abdominal incision partly healed before there is any chance of contamination.

All the wounds healed by first intention, except where the drainage tube was inserted below, which was removed several days afterwards, and the patient made an uninterrupted recovery.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section for the Study of Disease in Children.

Meeting held Friday, October 25th, 1912.

The President, Mr. A. H. Tubby, in the Chair.

Dr. E. C. Williams read a paper on precocious development in a boy, æt 6. The patient was unusually tall and heavy for his years, and his external genitals were fully developed. He was slow in movement and intellect. There was an abundance of pubic hair, but none in the axillæ. His voice was deep like an adult. He was in excellent general health and could lift with ease heavy weights. No abdominal tumour could be felt.

Dr. Edmund Cautley showed (1) a case of tetanoid spasms. Male child, born September 4th at term, without difficulty, and brought up on milk and barley water. Since 10 days of age he had had attacks of rigidity about every half hour. The mouth was said to be clenched, the neck rigid, but the head not retracted, and the hands clenched. He took food with difficulty and regurgitated some through the nose during the attacks. The child's nutrition was good. There was no indication of sepsis, and only a few curds were present in the stools. During the attacks the whole of the upper half of the body became rigid, the neck muscles extremely so, and the head was slightly retracted. The eyes were closed and the mouth could be opened very little. The fontanelle did not bulge. The hands were flexed at the wrists and the fingers and thumbs hyperextended, not assuming the attitude characteristic of tetany. The toes were hyperextended. Since admission the attacks had become less frequent and less severe.

(2) A case of partial aphasia in a female child of 3, admitted to the Belgrave Hospital for Children on July 29th, 1912. For 12 days she had had slight cough, and for 6 days drowsiness and anorexia. On July 28th there was general twitching, possibly a fit. On admission she was drowsy and uttered occasional cries. There was no fever. The pupils were dilated and sluggish, and there was slight convergent squint. The head was a little retracted and the neck muscles rather stiff. The legs were flexed at the hips and knees, and the child resented them being straightened. She afterwards developed flaccid paralysis of the legs. Knee-jerks normal. Plantar reflex extensor on the left, flexor on the right side. Cerebro-spinal fluid was under considerable pressure, clear, and contained very few cells. On August 26th, she took more notice and moved arms about, but could not speak. She had steadily improved and gained weight, but spoke in a somewhat drawling manner. She was quite intelligent. The diagnosis lay between encephalitis and serous apoplexy.

Dr. J. Porter Parkinson showed a case of congenital syphilis (hæmaturia). The patient was a girl, æt. 8. There were seven other children; the first was born dead, the second was a seventh-month child and lived seven hours, the third child suffered from epileptic fits, and the others were presumably healthy. Three weeks before admission the patient had jaundice, vomiting and diarrhœa, and the urine was red in colour, and there was some swelling of the face and limbs. This passed off, but reappeared, and the child was brought to the hospital a week later. On admission there was slight œdema of the eyelids and ankles. The heart, lungs and abdomen were normal. The blood-pressure was 115 mm. The urine was reduced in quantity, 8 to 10 oz. daily, specific gravity, 1020, a considerable quantity of blood and a small amount of albumin. Microscopically no casts were seen, only blood cells and a few epithelial cells. There was a small linear scar on the lower lip. The Wassermann reaction was strongly positive, on this account she was having mercurial inunction. The blood in the urine rapidly diminished, and neither blood nor albumin were present after first week in hospital. The cerebro-spinal fluid was negative to the Wassermann test. The case was shown to elicit the opinion of members of the section as to the cause of the hæmaturia, whether syphilitic or not.

Dr. F. J. Poynton showed a case of congenital family cholæmia, with some further investigations into the nature of the condition. A girl, æt. 8, was admitted for an exacerbation of jaundice from which she had suffered since birth. Father and one sister jaundiced also. One sister died at 4 months with jaundice and convulsions. Skin, conjunctivæ, and mucous membranes definitely bile-tinged. Motions normal in colour; urine occasionally contained urobilin, but never bile pigment. Spleen palpable; had been getting much smaller during stay in hospital. Blood serum free from urobilin or bile pigments. Wassermann test negative. Red cells (September 28th), 3,711,250; white cells, 11,200; hæmoglobin, 56 per cent.; colour index, 0.75. Percentage of "hematies granuleuses" in red cells, 8 per cent. (September 26th); 11 per cent. (October 4th). Fragility on four separate occasions, 0.6, 0.65, 0.65, 0.65.

Dr. C. R. Box showed a similar case, for which excision of the spleen had been done with temporary benefit. (This patient has died since.)

Mr. P. Maynard Heath showed a case of genu valgum due to rarefaction and deformity of the shaft of the femur in a girl, æt. 5½. The chief deformity was due to a sharp bend in the shaft of the right femur—about 4 in. above its lower extremity. An X-ray photograph showed that at this joint the bone was so rarefied as to be practically translucent. The rarefied area was not sharply outlined, and there was no evidence of cyst formation. There was some laxity of the ligaments in the right knee, and a well-developed Macewen's spine at the point of attachment of the internal lateral ligament to the tibia.

Dr. Reginald Miller showed a case of cerebral maldevelopment (? sclerosis), with infantilism and idiocy. Boy, æt. 8½; born at full term by instrumental labour; first child. Appeared normal at birth, but did not develop properly; grasped nothing in fingers until 3½ years old. Teeth erupted from twelfth month to third year, but rapidly decayed and most were extracted when 4 years old. Height 35 in. weight 22¼ lb., circumference of head 17½ in. Face senile in appearance from falling in of mouth. Testicles partially undescended, left small. Could not walk or talk; never cried. Feet inclined to cross, hands and fingers hyperextended; tremor of lips and hands. Dirty in habits, very destructive. By retching efforts brought food up into mouth, and unless controlled produced vomiting by forcing fingers down his throat. Wassermann test, negative. Skiagrams (Dr. Harrison Orton): Long bones small, but otherwise normal. Mandible small and senile in type; only five teeth of second dentition visible unerupted.

Mr. Duncan C. L. Fitzwilliams showed a case of coxa vara in a boy, æt. 7. The condition was extremely like a congenital dislocation of the hip, for the whole of the right limb was smaller than the left; this was especially well seen in the feet.

Mr. T. H. Kellock showed a case of traumatic pancreatic cyst after operation. The patient, a girl, æt, 11, was knocked down by a horse in March, 1912, and said she was kicked by the horse in the abdomen. She was admitted to hospital almost immediately afterwards, somewhat collapsed and complaining of pain and tenderness in the left hypochondrium. The muscles in that region were very rigid, and it was thought that there was some fulness in the region of the spleen; there were no external marks of injury. The case was taken to be one of slight rupture of the spleen. Nothing was done surgically, the child gradually improved, and was sent to a convalescent home about a fortnight later. She was re-admitted to hospital September 14th, 1912, apparently in perfectly good health, a tumour was visible as she lay on her back or stood up, occupying the left hypochondrium; it was tense, fluctuating, fixed, and not tender on manipulation; extended to the right beyond the middle line of the body; was resonant above, but quite dull on percussion; at its central part resonance could be obtained behind it in the left lumbar region. The temperature was normal, and there were no abnormal constituents in the urine.

A few days after admission the abdomen was opened, and a retroperitoneal cyst exposed, which proved to be pancreatic. This was opened and drained. The patient was discharged on October 8th.

Mr. Sydney Stephenson showed a case of ocular torticollis in a girl, æt. 9, who was brought to the Eye Department of the Queen's Hospital for Children on August 29th, 1912, with the history that she had been treated for some months by electricity for torticollis. The child had carried her head on one side since she was 12 months of age, and the condition had not become worse since then. She had had no illness other than measles at 2 years of age. In the child's habitual attitude the head was inclined towards the right shoulder, forming an angle of about 30 deg. with the vertical. It could be straightened instantly at the child's will. There was no tension on the sterno-mastoid muscle, no twisting of the head and no asymmetry of the face, points in which the condition offered an instructive contrast with cases of ordinary torticollis. There was no obvious deformity of the skull. The spinal column was slightly inclined to the right in the dorsal region, and to the left in the lumbar region. With the head in the abnormal position, the right eye was often free from squint, but at other times it was inclined downwards for from 8 deg. to 10 deg. (strabismus deorsum vergens). But as soon as the head was straightened the other (left) eye deviated upwards to a corresponding amount (strabismus sursum vergens).

Mr. **Philip Turner** showed a case of lateral sinus thrombosis; operation; recovery. Boy, æt. 14, was admitted on July 8th for headache and discharge from the left ear. This discharge from the ear had been present for eight years, and had appeared during an attack of typhoid fever. The acute trouble appeared about a week before admission after a visit to a swimming bath. The left side of his neck became stiff and painful, and he had a shivering fit. On admission, his temperature was 104 deg. Fahr., and pulse-rate 128. A diagnosis of lateral sinus thrombosis was made. The antrum and mastoid cells, when opened, contained pus, and the posterior wall of the antrum was found to be destroyed, exposing the posterior fossa. A radical mastoid operation was rapidly performed, and the posterior fossa thoroughly exposed. The wall of the lateral sinus was sloughing and pus was oozing from a small perforation in this. The sinus was opened for an inch, and, after septic clot had been scraped away, bled freely from its upper end. The internal jugular was then ligatured. The temperature fell to normal 23 days after the operation, from which time convalescence was uneventful. Cultivations of the pus showed the presence of *Bacillus pyocyaneus*, *pneumococcus*, and *Streptococcus longus*.

Dr. **T. R. Whipham** showed a case of (?) anterior poliomyelitis. The patient was a girl, æt. 7, who presented an atrophy of the muscles of the forearms especially on the left side. The wasting was more marked in the flexors than in the extensors. The hands were small, and there was marked wasting of the muscles of the thenar and hypothenar eminences. The interossei were also affected. The reflexes and sensation to all stimuli were normal. The upper arms were unaffected, and there was no abnormality elsewhere. The condition was first noticed when the child was 3 months old, and did not seem to have progressed since.

SPECIMENS.

Dr. **Alexander Morison** showed a specimen of deficient foramen ovale septum in a male infant, æt. 5 months, who was admitted to the Great Northern Central Hospital on April 29th, 1912, suffering from difficulty of breathing, with signs of bronchitis and a systolic cardiac bruit. Bruit apical, loudest on left posteriorly. Also exhibited cantering rhythm at apex. Condition regarded as cardiac malformation. No cyanosis. Pulse-rate 132; rhythm regular. Respiration 32 to 38. Temperature normal. Death occurred on May 29th, 1912. At the autopsy all the chambers of the heart were enlarged and hypertrophied; this most marked in right auricle, which exhibited the somewhat rare abnormality of deficient septum, as distinguished from patent foramen ovale.

Dr. **Edmund Cautley** exhibited a specimen of tuberculous right kidney from a child, æt. 12 months, who during life presented a large, soft, tense, elastic tumour in the right lumbar region, extending down as far as the anterior superior iliac spine, and pushing the liver forward and to the left. No pus or tubercle bacilli were found in a catheter specimen of the urine, and von Pirquet's reaction proved negative. The tumour increased rapidly in size and presented a soft fluctuating swelling over the end of the last rib. An incision was made in this region and about 14 oz. of sweet, sterile pus evacuated. Death ensued a few days later from asthenia. The temperature was irregularly febrile throughout. *Post mortem*, the right kidney was much enlarged and the upper half extensively caseous. It communicated with the remains of a post-nephritic abscess cavity.

SPECIAL REPORTS.

FESTIVAL DINNER OF THE IRISH MEDICAL SCHOOLS AND GRADUATES' ASSOCIATION.

The annual festival dinner of the Irish Medical Schools and Graduates' Association was held on Thursday, October 31st, at the Hotel Cecil. The President, Dr. H. Macnaughton-Jones, was in the chair, and a large and distinguished gathering, including many ladies, was present. After the usual loyal toasts had been honoured, Dr. W. Douglas, the President-elect, proposed the health of "Our Defenders," and Surgeon-General Greany, T.M.S., replied. The toast of "Our Guests" was proposed by Sir R. Havelock Charles in a felicitous and witty speech, coupled with the names of Sir James Barr, the President of the British Medical Association, and of Dr. Esmonde, M.P. Sir James Barr said that, although by birth an Irishman, he did not possess an Irish qualification. In company with some of the earlier reformers, including Sir Walter Foster, for many years past he had taken a large interest in medical politics, and especially in the one-portal system. Hence he had been led to take exception to the action of the English Royal Colleges of Physicians and Surgeons, and of various official and other bodies, whereby many hospital appointments were open only to those who held the qualifications of these examining bodies. Nowadays he imagined that the necessity for a one-portal system was gradually disappearing, owing to the multiplication of universities, and in the process of time this particular abuse of which he spoke would die a natural death. So far as the Insurance Act is concerned, Sir James Barr said that he was sick of the whole business. He regarded the Act as a wretched makeshift, and remarked that all that he had said in times gone by was not half strong enough. During the whole of the day on which he was speaking he had been busily engaged in discussing the Act, and for all he knew his colleagues might even then still be sitting. There was not a day in the week on which some member of the general public did not say to him, "Why does not your profession wreck the Act?" His reply was, "Why not wreck it yourselves?" His only personal concern in the matter was in paying their own private contributions. He sincerely hoped that whatever decision was arrived at would be accepted by the profession as a whole. He could not help saying to himself, "Here is an Act of Parliament which will cost the nation £30,000,000 a year. What is the public going to get for it?" If taken ill, a man may get 10s. a week, a woman 7s. 6d, after four days' illness, and on production of a medical certificate to prove that there has been no shamming. As for the maternity benefit of 30s., he regarded it as a miserable dole, which was not likely to stop the falling birth-rate. They were promised an efficient medical service, but what they would get was no more like an efficient medical service than a London fog was like bright sunshine. The service contemplated was the worst possible medical service that could be given. In his opinion the more one does for the wage-earning portion of the community, the better for the nation at large. After careful perusal of the Act, the only definite benefit that Sir James Barr could discover was the death certificate. He never had justified club practice, which he regarded as the greatest curse of the medical profession. It was usually begun by young men who wished to begin practice, and so get into touch with the public. On the part of others, it was an act of charity, but it was quite a different thing to be compelled to do work on such terms for the Government. (Applause.) As far as he could see, the Act was to be worked on a charitable basis, since it was only by linking up with charitable institutions, such as hospitals and dispensaries, that treatment could be carried out. Apart from the problematical sanatorium benefits, there is no direct provision as yet. At the present time kite-flying is being carried on, calculated to arouse the ire of the medical profession. To start with, we were threatened with 5,000 underpaid German doctors, who were to be brought over to work the Act. A public medical service had now been proposed, but this, although not inadvisable, would be enormously expensive, and once established, a hospital service would also have to be set on foot for those insured, so that for 15,000,000 people the cost would not work out to less than £1 per head. On this salary basis men would not work more than five, six or eight hours a day, instead of sixteen or eighteen. The Insurance Commissioners had already threatened to start a medical service with a certain section of the profession, who would inevitably be the riff-raff, and would be ostracised by their brethren. Under any circumstances, Mr. Lloyd George would not get the best men to work his scheme. In thanking those present for the cordial reception which they had accorded to himself and his wife, Sir James Barr said that he was most anxious to do the best he could for the medical profession, and for the profession to do the best they could for themselves, not merely as a matter of remuneration, but for the honour and dignity of the profession. It was well known that wherever a medical man sees suffering he tries to relieve it, and, whatever might happen, the public at large might rest satisfied that their interests are perfectly safe in the hands of the doctors.

Dr. Esmonde, M.P., said that at the beginning of the Insurance Act dispute the Chancellor of the Exchequer had offered the sum that no honest or self-respecting man could entertain. Personally, he was sorry that in the beginning the Chancellor did not come to two or three *bona-fide* general practitioners who could have told him facts. The Chancellor had never treated the profession as a great and honourable one which had done more than any other for the public welfare. Dr. Esmonde said that each medical man would, however, be taking a grave responsibility if he did not very carefully consider whether the terms now offered should be refused or accepted as a basis of settlement of the question. Previously club practice had been done for small remuneration, but the class of work now required was far different, and the medical men must see that the best possible service should be given. The State service with which they were threatened is an impossibility, but an endeavour might be made by means of local metropolitan services to break down the strong present opinion of the profession. His view was that we ought to make an effort to treat with the Chancellor of the Exchequer. On both sides some concessions would probably have to be made. The secrets of the patients were, however, theirs, and they did not intend to have any third party intervening. It is all very well for the well-to-do members of the profession to talk about holding out, but in so doing they must avoid injury to their poorer brethren. He knew from experience of 25 years' general practice the difficulty of finding rent for the quarter-day. He thought that the time had now arrived when, in the interests of the general practitioners some settlement should be made. If after trial for some moths it fails, then it will be time to say that the profession will have nothing to do with it.

The toast of "The Association" was proposed by Sir Frederic Champneys, President of the Royal College of Physicians, and responded to by the President, Dr. Macnaughton-Jones, who said that he regarded the Insurance Act as the "great betrayal." He never thought to live to see his profession so grossly misrepresented since the beginning of discussion upon the Insurance Act. Even at the last moment the Chancellor appears to be trying to place the profession in the light of the servant who applied to his Irish employer for an increase of wages, and to whom the employer replied, "By aisy stages I'll raise your wages From fifty shillings To two pounds ten."

The toast of "The President" was drunk with acclamation, and the proceedings then terminated.

THE HEALTH OF THE BUSINESS MAN. (*a*)

A conference on "The Health of the City Worker," under the auspices of the Incorporated Institute of Hygiene, was opened last week at the Guildhall by the Lord Mayor of London. The Lord Mayor (Sir Thomas Crosby, M.D.), who opened the proceedings, said that he believed that the principles which applied to the health of the City worker would apply equally to all private houses. During his 60 years' practice of medicine in the City he had seen an almost entire rebuilding of rooms in which clerks worked. It was his experience that the health of the clerk was well looked after, but it was well that with improved ideas the subject should be ventilated. Referring to the drainage of the City, he said the improvement had been marvellous and the health of the workers had seen a corresponding change for the better. Many fevers had disappeared from the City. In his youth typhus was no uncommon thing; now it was unknown in London. With improved water supply enteric fever was very rare. These were only passing thoughts of a wide and long experience. He bade the delegates welcome on behalf of the City of London and of himself. He looked forward with great delight to receiving instruction from the speakers.

Sir William Bennett said:—The Incorporated Institute of Hygiene, as may be known to some of those present, is more particularly concerned in the practice and teaching of the health of the individual and the hygiene of the home—personal and domestic hygiene—and particularly in the attainment of purity of foods. It therefore seemed to the Council that the health of the business man and City worker came well within the sphere of its operations, and was at the same time a matter of rapidly increasing importance in these days of high pressure and acute competition. It is obvious that work—in quality as well as quantity—of those in indifferent health, whether physically or mentally, must be of comparatively small value, and, further, that a temporary depression of vitality or energy in a worker, generally in good health, may seriously impair or annul the value of work for the time being. It is also, I suppose, an open secret that the surroundings and individual habits of many of those who carry on their affairs in our cities and towns are not such as tend to the highest grade of efficiency. It was therefore determined to promote a conference upon the subject of "The Health of the City Worker," with a view to discussing the matter and in the hope of arriving at some useful conclusions and suggestions. The time for such a project in the City of London seems particularly appropriate, too, seeing that the present Lord Mayor has not only been a hard worker in the City for many years, but that he is, in addition, a well-known medical man. He was, therefore, approached upon the matter, and not only expressed a sympathetic interest in it, but consented to open the Conference himself, thus giving it an importance—especially in the minds of City men—which it could not otherwise have obtained. Such is the story of the materialisation of the work which commences this afternoon. In concluding these remarks, I cannot help feeling that behind the interest we take in the matters about to be discussed, there exists in the minds of all of us the hope that the Lord Mayor will tell us the secret which has enabled him, after having passed by a full decade the traditional span of three score years and ten—after having, in fact, advanced well into middle age—to retain the vitality, energy and mental acuteness of a youth of thirty.

Dr. Olsen, speaking on the business man's lunch, said that the business man was naturally a brain, and not a muscle worker. Men like Lord Strathcona, in order to avoid hurry at meals, had adopted the habit of taking only two meals a day. But the luncheon hour is a safety valve. A light lunch is preferable. Meat should be cut out of the lunch, and a poached egg on toast, milk and bread, followed by fruit or nuts, was advisable. Nuts were sometimes found indigestible by people, but this is because they failed to masticate them properly.

Dr. Cameron Gillies said one of the things that appeared to him was that the rush and worry of City life was a fruitful source of dyspepsia. One could recognised this every morning in the City of London, where the chemists' shops at the various stations were crowded by customers. This was not due, he had found, to the "night before," but to the highly strung nerves of many of the workers; in the neighbourhood of the Stock Exchange the same thing was observable. He had known business people suffering terrible agonies from this source of trouble, and he would like to hear on this question some words of guidance. He

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(*a*) Institute of Hygiene. Conference on "The Health of the City Worker," Guildhall, London, October 28th, 1912, Sir William Bennett, K.C.V.O., F.R.C.S., President, in the Chair, had no intention of saying anything on the subject himself.

Dr. Farquhar Buzzard said that he would define the business man as one whose business it was to keep fit. His success depended on keeping his brain and nerves in the best condition. He had nothing to do with the business man in the City, and would therefore confine himself to the business man when his health failed. Why does a business man lose his health before the age at which he might be expected to fail? There were certain fallacies on this subject in the public mind. He did not believe that mere rush and a sedentary life were mainly responsible for ill health. Hereditary causes were fruitful of such an evil, and men so troubled should not have chosen the business life. Others started wth a normal reserve of power, but took no heed of their health and broke down before they reached 40. Another group of cases were the bad habit cases; they were all familiar with the fact that over-drinking, over-smoking, and over-eating were bad habits. He himself smoked and drank. There was a fallacy, he was convinced, in the public mind on the subject of drink. The medical profession were responsible for this fallacy very largely. There were men who confined themselves to whisky by medical advice and did themselves infinite harm. He felt that it was not important to confine oneself to any particular food, but it is important to rise with an appetite. As to exercise, he had patients who complained that they could not afford time for exercise. He had found cases of neurasthenia which were entirely due, however, to men trying to overcome by exercise the loss of energy incurred through work, thus draining the body of energy by two exists. He did not believe in muscular exercise, but he did believe in recreation.

Mr. Lewis R. Tomalin said that generally he followed the advice "early to bed and early to rise and never get drunk." Since 1881, when he was 32 years of age, he had been a teetotaler, while he had never been a drinker, and he had made a habit of wearing wool and even sleeping in blankets.

Dr. Cahill asked for some advice on exercise. Should they play golf or put their money on horses? City men had no monopoly of neurasthenia or the effects of over-feeding. The business man was, on the average, healthy as compared to men in other classes of workers. His life was, he believed, just as long. It was an easy life compared with men in other occupations. Their hours were short, they had time for "Bridge" at the Club before getting home for dinner, and they did not go to the office before about 10.30.

Dr. Strickland Goodall, dealing with diet in business, said that the City man oscillated between times of starvation and times when he did himself very well. To a man engaged strenuously in business the chief meals should be breakfast and the evening meal. Midday meals and all forms of games and business discussions should be avoided, because an organ in activity needed more blood supply than an organ at rest. He was opposed to feeding in tabloid form, and he believed in ceremony over meals. At least an hour should be devoted to each meal; avoid fads in food, and exhibit moderation in all things dietetic; pay a periodical visit to the dentist; the chief meals of the day should be the morning and evening meals; avoid all business discussions and reading during meals.

Sir Richard Stapley said that business men to-day indulged less in drinks between meals, and this was one of the great causes of improvement in the health of City men. Twenty-five years ago his firm took a stand against forcing drink on customers, and now their policy had been entirely successful. In the City now there was less enticement to these bad habits, both on the road and in the houses. It did not matter so much what people ate or what they drank, but what did matter was how they ate and how they drank. A friend of his believed in eating wholesome food in the fresh air. The facilities for this were much greater now than twenty years ago. We could all build up our own health by proper thought.

Dr. Lauzen-Brown said that, in addition to improvement in the water and food supply, they could pride themselves in the City on having laid on a better supply of fresh air. This had led to a great diminution of the dread scourge of tuberculosis. He is informed that at the present time there were not more than thirty cases of tuberculosis in the City. The habit of avoiding alcohol between meals was spreading from the upper strata of society to the lower.

The Chairman, in his closing remarks, said that for those who did not work in the City it was hard to speak of City habits, but they had learned much that was valuable from the discussion. Several points of great interest had been mentioned. On the question of exercise he believed more nonsense had been talked than on any other subject. Personally, he took as little exercise as possible. Some time ago, when his health was not so good, he was advised to ride before breakfast, and he did so for a month, but if he had not abandoned the practice he was convinced he would not be here now. No general advice could be given, but a law could be laid down only in special cases. A tired man should not tire himself further with exercise. Drinking between meals was the most vicious thing in the world. For twenty-seven years he had taken a good breakfast and a light milk pudding for lunch, and ever since, with two slight exceptions, he had not had a day's illness.

THREE SANITARY REPORTS. (*a*)

These three reports by the Medical Officers of Health of the respective districts all have certain features in common. Each shows an increased death-rate over that of the previous year. England had to pay toll for a meteorologically perfect summer by suffering an epidemic of infantile diarrhœa. The prevention of tuberculosis occupies the attention of all the sanitary authorities, and importance is attached to diseases of childhood, notably measles and whooping-cough, which are popularly supposed to be inevitable in their incidence and harmless in their effects. The Carlisle authority issues a careful notice giving precautions against the spread of these diseases. Derby is especially unfortunate in its diphtheria statistics, the five-year period 1907-1911 showing the highest recorded prevalence.

Dr. Bate notes that Bethnal Green, in common with the rest of London, is becoming depopulated centrifugally. Here, too, the infantile death-rate from diarrhœal diseases was considerable, and amounted to 44.8 per 1,000 births, nearly treble that of 1910.

These three reports are well got up and furnished with an abundant supply of statistical tables and diagrams, and each contains material of value to those who are directly concerned with matters pertaining to the public health.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 2nd, 1912.

Lumbar Puncture in Surgery.

Lumbar puncture, says Dr. Mauclaire, of the Hôpital de la Charité, as reported by the *Monde Médical*, is a comparatively recent operation; it was first proposed by Leevard Corning, of New York, in 1885.

But it was only in 1891 that Quinke showed all its advantages from a therapeutic point of view. At first it was almost exclusively the Germans and the Americans who employed the lumbar puncture, but soon afterwards, Tuffier drew attention to the special

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(*a*) 1. "Report on the Sanitary Condition of the City of Carlisle for the Year 1911." By Joseph Beard, D.P.H.,Cantab., etc., Medical Officer of Health, etc. C. Thurman and Sons, Carlisle. 2. "Annual Report of the Medical Officer of Health of the County Borough of Derby for the Year 1911." By Albert E. Brindley, M.D., D.P.H., etc. J. W. Simpson and Sons, Ltd., Derby. 3. "Report on the Sanitary Condition and Vital Statistics of the Metropolitan Borough of Bethnal Green during the Year 1911." By George Paddock Bate, M.D., Medical Officer of Health, etc. Thos. Bean and Son, 67, Golden Lane, E.C.

characters of the cephalo-rachidian liquid in traumatism of the skull and the vertebral column, insisting, in a series of communications on the subject, on its sanguinolent coloration in fracture of the skull, and these observations were confirmed by Guinard, Poirier, Schwarz, Monclaire and others.

By the lumbar puncture a certain quantity of cephalo-rachidian liquid is withdrawn from the sub-arachnoid space; the needle is inserted between the fourth and fifth vertebræ, not exactly in the median line, but about a quarter of an inch to the right so as to avoid passing through the thick interspinous ligament; the needle is directed slightly upwards and inwards. The instrument should be in platinum, strong and resisting, about five inches in length with the point short and sharp. To distinguish the blood coming from an accidental wound of a vein from that of intra-rachidian hæmorrhage, the liquid should be received into several tubes of the same calibre.

Where the liquid presents a gradually decreasing coloration, the needle has passed through a vein of the skin or the muscles; also where the puncture gives issue of blood mixed with the liquid, a vein of the dura mater has been wounded; in that case it is sufficient to push the needle in a little farther to obtain the clear liquid.

To avoid syncope, it is better that the patient should not be seated, but placed on the side with the legs well drawn up so as to expand as much as possible the inter-vertebral space. As to the quantity of liquid to be withdrawn there is no fixed rule, it depends mostly on the degree of pressure of the liquid, but an average of 5 drachms should scarcely be exceeded. Naturally, in case of hypertension where the liquid comes out in a strong jet, a larger quantity may be extracted than if it flowed slowly drop by drop. In any case, no more than one ounce should be extracted at the time, the total amount of cephalo-rachidian liquid in the normal state being but 6 ouces, it is better to repeat the operation, if necessary, than to extract too much at once.

As after effects, vertigo, syncope, etc., have been observed, but such accidents are rare; they chiefly concern nervous persons.

Headache of short duration, however, is frequently complained of, it is due to an increase of pressure of the cephalo-rachidian liquid, but this hypertension is quickly followed by hypotension.

It cannot be denied, however, that several cases of sudden death after lumbar puncture have been reported. Dr. Cramer, of Geneva, recently published a number of cases, 38 in all, but 28 of these concerned patients suffering from tumours of the brain or cerebellum. As to the real cause of such fatal accidents, the opinion has been expressed by Prof. Sicard that the lumbar puncture by diminishing the quantity of the cephalo-rachidian liquid causes to fall on the floor of the 4th ventricle the mass of cerebellum increased by the volume of a tumour, thus producing compression of the respiratory centre.

These accidents, however rare, call for prudence in the practice of the operation, hence the necessity of allowing the liquid to flow only drop by drop.

Indications and results.—In cases of cerebral *commotion*, slight or grave, the lumbar puncture gives but little result.

In cerebral *contusion* attended with hæmorrhage on the surface of the brain, the operation may be useful as a decompressor of the nerve centres; the liquid is coloured.

The third variety of traumatism of the skull is cerebral *compression* and generally due to effusion of blood (rupture of the middle meningeal artery) on the brain. The effusion takes place between the inner table of the skull and the dura mater.

The signs of cerebral compression from effusion of blood are loss of consciousness, hemiplegia on the opposite side and aphasia, if the centre of language is touched.

Here the lumbar puncture possesses real therapeutic value: the cephalo-rachidian liquid, abundant and hæmorrhagic, flows out under strong pressure and the operation frequently improves the condition of these patients.

Fractures of the skull are sometimes difficult to diagnose, as none of the signs can be regarded as conclusive. Subconjunctival ecchymosis has but little value if it does not appear within 36 or 48 hours after the traumatism. Otorrhagia, epistaxis, may easily mislead, and the cephalo-rachidian liquid flowing through the nose or the ear, may pass unperceived, being mixed with blood.

Hence, it was asked if there did not exist a more certain sign affirming the existence of these fractures and some authors believed to have discovered it in the hæmorrhagic transformation of the cephalo-rachidian liquid withdrawn by the lumbar puncture. But repeated experiments showed that even in positive fractures of the skull the liquid may come out clear.

From a therapeutic point of view, puncture has given good results in cases of persistent headache following traumatism.

Other affections have also been benefited by this treatment although to a lesser degree. It is thus that in certain cases of meningitis, cerebral abscess, tumours of the encephalus, especially those accompanied with marked hyperpressure of the cephalo-rachidian liquid, provoking amaurosis, the lumbar puncture produces frequent improvement, but this method is specially useful in clearing up a doubtful diagnosis, for instance, to distinguish a tumour from a syphilitic gumma.

Good effects of the lumbar puncture have also been remarked in certain ocular lesions with tendency to glaucoma and in cases of uræmic cephalalgia.

However, it must be admitted that lumbar puncture produces but transitory relief, as the liquid reforms with a certain rapidity.

On the other hand, it is of great use in clearing up the diagnosis of fracture or dislocation of the vertebral column, where the liquid is rose-coloured or bloody the fracture is evident.

GERMANY.

Berlin, Nov. 2nd, 1912.

At the meeting of the Naturforscher and Aerzte in the Department for Surgery, Hr. Czerny, Heidelberg, in connection with a paper on the

Non-Operative Treatment of Tumours

showed a large series of interesting illustrations of cases that had at one time appeared to be perfectly hopeless. They were mostly relapsing cases in which the disease had reappeared several times. The treatment had been by various combinations and aids, with a sort of recovery in the end, in which the patient at last secured a more or less tolerable state of existence.

1. The first case was one of recurring sarcoma of the upper jaw, in which recovery had been brought about by scraping out followed by X-rays.
2. Several cases of epithelioma that had been cured by mesothorium and in which the cosmetic effect had been remarkable.
3. Large epitheliomata in which recovery had been brought about by fulguration and X-ray treatment.
4. Several cases of various forms of tumour (sarcoma of the parotid, the abdominal wall) that had been extirpated by the de Forest needle (electric arc light).
5. Lupous carcinomata that had been treated with excellent cosmetic results by fulguration and X-rays.
6. Various cases (sarcoma of the cheek, carcinoma of the orbit, malignant lymphomata) in which various recurrences had been treated by salvarsan by injection sometimes into the walls of the tumour, and X-rays, had undergone striking and rapid improvement, ending in recovery.
7. Several cases of large carcinoma of the breast, which had ulcerated and had metastases in the surrounding parts, in which a combination of various forms of treatment had led to recovery.
8. Several cases of carcinoma of stomach, cardia, and rectum, in which by means of intensive Röntgen illumination in a few cases improvement took place and in others recovery.
9. Finally the animal tumour was shown in which recovery had been brought about by injection of borate of cholin. (*Vide* latest publications of Werner and Szeczi, "Med. Klinik," 1912).

Hrn. Nobel and Hecht, Vienna, followed with a report of their

ELECTROCARDIOGRAPHIC STUDIES OF NARCOSIS.

Proceeding from the fact that chloroform had an injurious action on the function of the heart, the writers of the paper tried to study its action on animals. 22 experiments were made on various animals (rabbits, dogs and monkeys) in which the action of the drug on the heart was followed until death took place. The effects mostly observed were disturbance of transmission (through bundle of His), of various grades, more extra systole, occasionally paroxysmal tachycardia, auricular fibrillation with arrhythmia perpetua and without it, and sometimes ventricular fibrillation.

In the case of a child under chloroform the cardiogram registered no changes. Amongst the many symptoms that preceded death from chloroform, bradycardia from stimulation of the vagus was the most frequent; this was followed later by heart block or symptoms of irritation.

In the experiments on animals atropin undoubtedly did good service. It cut off the vagus and acted as a muscular stimulant to the heart. In practice it had great advantages over the usual employment of camphor or adrenalin, as camphor had to be given intravenously and adrenalin was sometimes dangerous, as Lewis and Levy had shown. Atropin was best given intravenously in doses of from 0.001 to 0.002 gm., or even before the operation was begun.

Hr. Wrede, Jena, was able, from his own investigations, to confirm what had been adduced by the two previous speakers.

Hr. Reicher asked whether the electro-cardiogram during the course of an operation would give the danger signal in time to take measures to ward off the danger?

Hr. Nobel had never observed that it would.

The Central Committee for Volks and Jugendspiele (Games) concludes an appeal to the public with the following:

1. The strength of the woman as regards the nation is as important as that of the man. For this reason bodily exercises for women are necessary.
2. In all, both higher and lower girls' schools, both in town and country, three hours per week should be given to gymnastics, and a general play afternoon should be obligatory in all grades weekly.
3. Such exercises are to be preferred as enlarge the chest and strengthen the heart; they should take place in the open air as much as possible.
4. Walks should be encouraged, also swimming, games on the ice and snow. No healthy girl should be allowed to leave school until she has learned to swim.
5. Excursions should be kept up the whole year, the obligatory play afternoon may be made use of for this purpose. In the upper classes, independent of the usual school excursions there should be at least one whole day excursion once a year. Holiday excursions should be encouraged by the school.
6. After leaving school, gymnastics, country games and allied bodily exercises should not be neglected. Every true friend of the Vaterland should co-operate earnestly with the central committee, so that games and exercises that call into play the movements necessary for the female sex may become the custom of the people, and that the dress from infancy upward should be constructed on intelligent principles.
7. The State and individual communities must make provision and give opportunity for the carrying out of these exercises. The expenses attending all this have as much importance for the nation as those justifiably devoted to the German Army.

AUSTRIA.

Vienna, Nov. 2nd, 1912.

DIABETES IN THE GRAVID STATE.

PORGES related the case of a female in the fifth lunar month who was eliminating 5 to 15 grams of sugar when fed on carbohydrates, but only .3 to 6 grams when on vegetable diet—*i.e.*, non-carbohydrate and a *régime* poor in albuminoids. It not infrequently happens that females in the pregnant state often pass large amounts of sugar that might lead the unwary astray, which may be easily checked by this simple experiment. Where there is a morbid condition present this variation does not depend on the alimentary canal, but on a lesion. Genuine glycosuria, or diabetes, has also another diagnostic sign—viz., hyperglycæmia. In this case the kidney is a mere sieve or sponge for passing the saccharine fluid through it in abnormal quantity. In alimentary glycosuria the relative quantity is only disturbed in the regulation of the saccharine elimination, which has a constant level in the normal condition. Therefore a low hyperglycæmia and one easily affected by the alimentary factor are two characteristic clinical symptoms to guide us in genuine nephritic diabetes.

DIABETES INSIPIDUS.

Steiger recorded a case of considerable importance, which he thought required careful investigation. The patient had no history of any psychical disturbance, disease about the head, nor injury to cause a real typical condition of diabetes insipidus, which he would designate idiopathic, as it was not due to weakness in the power of concentration, nor hypophysical, as there was no deepening to be observed in the sella turcica.

In connection with this idiopathic condition a very irritable state of the vegetative nerve system existed, in which atropin had the effect of allaying and reducing the flow of urine, while pilocarpin, the alkaloid, increased the flow of urine. What the origin of the disease was he would not venture to conjecture, but it was interesting to investigate.

HYPERTENSION AND GLYCÆMIA.

Nagelberg, in his clinical lecture, said he was not satisfied with the simple theory that choking up and wasting of the vessels in the kidneys, causing a rise in the blood-pressure and a greater resistance in the cardiac action, was the real cause of the great amount of sugar stored up in the blood. He believed the hypertension was more probably due to adrenalin product. The examination of the metamorphosis of sugar gave a very hypertonic condition, which led him to believe that this adrenalin caused the great increase of sugar in the blood. He found in the greater number of cases of chronic nephritis with hypertension an increase in the saccharine property, and this hyperglycæmia is still further increased by the higher tension of arterio-sclerosis. When the arterio-sclerotic shrinking is complete, notwithstanding the destruction of the organ, the amount of sugar present is almost normal.

ERROR IN THE ERYTHROCYTE RESISTANCE.

Schaeffer finds that Liebermann and Fillinger's estimation of the resistance of the red blood corpuscle has many fallacies that require to be avoided. The first in the destruction of the capillary in the hypotonic solution, which was affected by the breath, and contains carbonic acid, which acts as a hæmolytic agent. Again, the temperature of the hypotonic fluid is to be observed, as the nearer the normal condition of the body the erythrocyte has the greater resistance.

THE PATHOGENESIS OF ORTHOPTIC ALBUMINURIA.

Stiller considers that all orthoptic patients are, without exception, those of an asthenic constitution, and confines his argument to the low state and weakened organisation of the kidney. Although the illness is slight at first, being confined to the kidneys, which is probably due to nephroptosis, stenosis of the upper part of the chest, initial phthisis, or a narrow aorta with sclerosis, which soon produces the jehle lordosis, which is the real cause of orthopic albuminuria.

UNITED STATES OF AMERICA.

Washington, Oct. 12th, 1912.

THE INTERNATIONAL CONGRESS ON HYGIENE AND DERMOGRAPHY.

(*Continued from our last week's issue.*)

As was eminently fitting, the section devoted to the consideration of infant and child hygiene was the fullest and most diversified of the Congress. Another point of interest and instruction in these days of militant suffragism was the prominent part played in this section by women. Perhaps the two best papers read were by lady physicians, one by Dr. Helen Macmurchy, of Toronto, an able, practical organiser, and an exceptionally capable exponent of her views, either as a lecturer or writer. The other paper was by Dr. Janet Lane-Claypon, of London, Dr. Eric Pritchard's right hand in the campaign for the reduction of infant mortality in Marylebone. Another paper of unusual merit was read by Dr. S. Josephine Baker, of the Department of Health, New York city. Indeed, almost as many papers were read by women, most of them physicians, as by men in this section, moreover, the papers read by women compared very favourably with those read by men. Militant suffragettes are rare in the United States and in Canada but, on the other hand, women in these countries and especially those of the medical profession are coming daily more and more to the front.

The title of Dr. Helen MacMurchy's paper was

What Medical Inspection of Schools Can Do for the School Children.

Referring to the mentally deficient child the author said that these pupils were the source of much difficulty to the teacher, often causing disorder in the class, etc. School medical inspectors should remove such children to special classes, for their own benefit and to the great relief of all concerned. Dr. MacMurchy laid stress on the fact that medical inspection of schools, dealing with each child personally, tended to impress on us the individuality of each child, and directed attention to his endowments of strength, special senses, etc. It was pointed out that we were always trying to deal with human beings as soldiers, lawyers, children women, Chinamen, or something less than human beings. The man or woman who was dealing with human beings as such, that is the teacher, was doing the highest kind of work.

Dr. Janet Lane-Claypon discussed the organisation of the work of infant consultation and health visitors. In the course of her paper the author said that without underrating the value of a good milk supply, experience had shown the still greater value of the direction of the general hygiene of the infant, such as could be carried out by an Infant Consultation with its staff of qualified health visitors. Such organisations actively encouraged breast-feeding, and in the case of artificially fed children the amount of milk, while the number of feeds given was regulated and over-feeding prevented; the general condition of life of the child and of the mother were also supervised, and faulty points could be quickly corrected. In England many of the milk depots had been given up, and such as were still open were now, in almost all cases, attached to Infant Consultations. A valuable paper directly bearing upon infant mortality was that of Miss Ellen C. Babbitt, New York City, dealing with

The Care of the Expectant Mother.

Miss Babbitt drew attention to the fact that the work of caring for the expectant mother had but recently been undertaken in America. At the present time in Boston, in New York, in Baltimore, St. Louis, and in Chicago, and in many of the smaller cities, the expectant mother was being watched over. This prenatal work had been undertaken by private philanthropy. The Boston Board of Health had carried on the work so excellently begun, and soon the New York Milk Committee would have the good work it was now doing supplemented by the Child Hygiene Division of the Board of Health of New York City. In all of the cities in which prenatal work was being done it was under medical supervision, the physicians making the examinations and giving individual instructions and advice. The expectant mothers were then visited in their homes by the trained nurse who went to see that the advice was being followed and to make it possible for it to be followed. This meant the hearty co-operation between the various medical and charitable agencies.

Infant Mortality and Its Relation to the Employment of Mothers

was also dealt with. In Great Britain most authorities, including Dr. Sykes, Health Officer of St. Pancras, London, hold that the employment of mothers has a distinctly injurious effect upon the health and mortality of the offspring. The effect would seem to be an obvious consequence, taking into consideration that when the mother is at work away from home the infant is deprived of its natural food. Breast feeding is deemed by all authorities the best mode of nourishing an infant, and therefore when this form of feeding is not obtainable the infant must suffer. However, the first paper on the subject, read by Mr. Charles H. Verrill, of Washington, stated that, as a result of investigations made by him at Fall River, Massachusetts, a factory town in which many married women are employed, such employment had little or no effect upon infant mortality. Mr. Verrill found that the high infant mortality of Fall River was only in a slight degree due to industrial employment of mothers. for 38.6 per cent. of all deaths under one year of age were due to diarrhœa, enteritis and gastritis, while among children of mothers at home the percentage was 34.6. According to Mr. Verrill the causes of the excessive infant mortality in Fall River were in short the mother's ignorance of proper feeding, of proper care, and of the simplest requirements of hygiene. To this all other causes were secondary.

On the other hand, Dr. George Reid, of Stafford, England a well-known authority, read a paper in which he expressed the most decided opinion, formulated as the outcome of wide experience, that the employment of mothers did injuriously affect infant mortality. Dr. Reid advanced proofs in support of the force of his claim.

Dr. Isabelle Thompson Smart, of Nek York City, read a paper entitled.

Studies in the Relation of Physical Inability and Mental Deficiency to the Body Social.

A point greatly urged in this paper was the absolute necessity for more school clinics and more hospital clinics arranged at hours to suit the needs of the school child, instead of, as at present, during the hours of the school day. Mrs. Frederic Schoff, of Philadelphia, insisted that the co-operation of parents was essential in the promotion of child welfare. A part of the section on child hygiene to which close attention was paid was that which considered the care of children's mouths and teeth. Dr. William H. Porter, Boston, Mass., pointed out that the actual condition of children's teeth could be best studied in the public schools, and that the treatment of defective teeth in such schools, whereby unclean, inefficient mouths had been made and kept clean and efficient, had been followed by a notable increase in the general physical health of the child.

The section on

Child Hygiene

provided a *raison d'être* for the reading of a large number of papers by authorities of world-wide fame, and the result has been a dissemination of knowledge on the subject which will undoubtedly do a vast amount of good. In dissecting the papers read, one would probably come to the conclusion that in some respects Europe is ahead of America with regard to practical child hygiene. For example, infant consultations, with all that they imply, are almost unknown on this continent. New York, however, has little to learn with regard to the care of infants from any city of the world—indeed, could give useful lessons to most cities. On the whole, however, considering America in its entirety, the practice of child hygiene has not progressed so far as it has in Germany and Great Britain. The chief facts to be gathered from the papers read are that so far as the working classes are concerned ignorance is at the bottom of infant mortality. In America, even among the working classes, breast-feeding is at a discount, and just so long as this state of affairs exists so long with a high infant mortality persist. Educate the mothers to feed their children at the breast would appear to be the moral to be extracted from the papers read before the Congress.

A symposium on

Poliomyelitis

was probably the most important event at the Congress, both on account of the reputation of the men who took part in the discussion and of the results achieved. Among those who read papers on poliomyelitis were Dr. Francis Harbitz, of Christiania, who dealt with epidemic piliomyelitis in Norway; Dr. Netter, of Paris, who discussed its ætiology and prophylactic measures; Mr. Levaditi, of the Pasteur Institute, Paris, Dr. Karl Landsteiner, of Vienna, Dr. Simon Flexner, of the Rockefeller Institute, Dr. Paul Römer, of Hamburg, and Dr. M. Neustaeder, of New York, who discussed sanitary measures against poliomyelitis. Professor Alfred Pettersson, of Stockholm, gave the results of investigations on the modes of infection and its prevention, its symptomatology in monkeys, and the epidemic of poliomyelitis in Sweden in 1911-1912. Dr. Mark Richardson, of Boston, Mass., dealt with the disease as observed in Massachusetts 1907-1912; and lastly, Dr. M. J. Rosenau, of the Harvard Medical School, announced that he had discovered that the disease might be spread by means of a species of the stable fly.

Dr. Pettersson's paper was in effect an epitome of investigations on epidemic infantile poliomyelitis by himself, Carl Kling, Wilhelm Wernstedt, and Arnold Josefson contained in a report from the State Medical Institute of Sweden. The gist of the report was that the seat of entrance of the virus of the disease is the naso-pharynx. Dr. M. J. Rosenau stated he had discovered that the disease might be conveyed by stable flies. Although opinion in Sweden admits the possibility of indirect transmission by insects and inanimate objects, the experiments with flies by the Swedish investigators were negative. Josefson, however, produced experimental poliomyelitis with saline extracts of a handkerchief and embroidery work, which had been used by patients acutely ill, even after the material had been allowed to dry for some days before making the extract. These findings are in keeping with observations by other investigators that the virus could be found in dust, and remain active after thirty-one days in sterile milk. The deductions to be drawn from the investigations of Prof. Pettersson and colleagues would seem to be that as poliomyelitis is mainly due to direct transmission the disease should be made notifiable everywhere, and that isolation of those affected should be enforced. Further, the investigations in Sweden appear to have brought out the fact that the frequency of the virus in the intestine is largely due to the swallowing of the infected nasopharyngeal secretion; thus it follows that prophylactic measures, as well as being directed towards the nasopharynx should include the sterilisation of the patient's motions.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Occupational Diseases.

Dr. Alexander Scott, Certifying Factory Surgeon and Medical Referee for Industrial Diseases, delivered one of a series of lectures promoted by the Glasgow School of Social Study in the Political Economy Class Room at the University, the subject of his lecture being "Trades Diseases." The subject must appeal to their higher impulses with great force from a humanitarian point of view, and it had an economical as well as a sentimental side. The lecturer said that the two essentials in every employment were: (1) That the physical and mental powers of the worker should be strong enough to enable him to perform his allotted task without danger, and (2) that the nature of his work should not affect his health or well-being. Industrial hygiene was occupied with the attainment and preservation of those conditions. After referring to the dangers of dust in its various forms, and to the different trades in which the workers suffered from swallowing or inhaling it, the lecturer dealt with the metallic bodies which were directly poisonous, and instanced lead poisoning as the most important in that it assumed many forms, and was frequently insidious in its onset. Amongst other diseases of occupation referred to was that of anthrax, which was highly infectious amongst animals and was generally transmitted to man by inoculation. No other disease was so true to the physical condition of dust. Workers chiefly in the sphere of infection were those engaged in the wool industry, in hair factories, and the manipulation of hides and skins. Anthrax was comparatively rare in Britain, though it was estimated that there were about a thousand cases annually, and three were reported in Glasgow last year.

In conclusion he said there must be more medical supervision of workers, and that many cases of trade diseases were still unrecorded and many more were never recognised. Nor could it be otherwise until medical supervision at the factory was followed by medical supervision at the homes of the workers.

Dr. Scott looked forward with interest to the Records of the National Health Insurance Act, as one effect of that Act would be to make accessible a record more thorough and complete of the incidence of disease than anything hitherto obtainable. Only certain diseases were at present notifiable, but under the operations of the Insurance Act it would be possible to obtain from the Insurance records more specific information as to the incidence of diseases of occupation. At present a death might be registered as due to paralysis, but it would be a valuable addition to their knowledge to learn whether the immediate cause of death was traceable to, say, lead poisoning. He seemed to see that they should yet in time be able to discover precisely to what extent the nation was being annually depleted of its workers by disease of occupation which might be preventable.

Appointment of Glasgow Professor to Sydney University.

Dr. A. Anstruther Lawson, Lecturer on Botany at Glasgow University, has been appointed to the new chair of Botany in the University of Sydney, New South Wales. He is the first occupant of the chair, and takes up his new duties on March 1st, 1913.

Dr. Lawson, who in the year 1895 began his study of botany under Professor F. O. Bower, has had a most distinguished career, and has become a recognised authority on three phases of botanical study—namely, the gymnosperms, the marine flora, and cytology, and many memoirs on these subjects have been published by him.

Dr. Lawson hails from Fifeshire, his mother being the well-known Scottish novelist, Mrs. J. Kerr-Lawson, and a brother being the artist, Mr. James Kerr-Lawson.

BELFAST.

Public Health.

During the past month there has been a considerable outbreak of scarlatina in Belfast, especially on the Co. Down side of the river. In five weeks 178 cases were reported, and there were a good many deaths. The epidemic is giving some trouble to the authorities, as the parents of affected children try to conceal the nature of the illness to save the children from being taken to the Purdysburn Fever Hospital. In spite of this epidemic, the general health is not bad, and the death-rate last month was 1.7 from zymotic diseases, 4.1 from chest affections, and 14.8 from all causes, as against 15.8 in Cork, 19.6 in Dublin, and 27.1 in Limerick. One very satisfactory feature is that not a single case of typhoid was reported in the city during the month.

The Corporation and the Foreshore.

Mention has frequently been made in these columns of the difficult, and in some respects unique, problem which faces the civic authorities in Belfast—the nuisance caused by the enormous growth of a green seaweed on the shores of the Lough, between high and low water marks. This weed is the Ulva latissima, and already many thousands of pounds have been spent in trying to get rid of it, for it has the peculiar property of giving off sulphuretted hydrogen as it decays, thus polluting the air for miles around. The numberless experts who have been consulted all agree that it grows because of the deposit of sewage on the shore, and committees and commissions have considered the question, while the unhappy ratepayer pays out his thousands. The Belfast Health Commission, the Royal Commission on Sewage Disposal, and a Select Committee of the House of Commons have all strongly recommended one course—namely, the reclamation of a large area on the south shore of the Lough, just below the city, where the weed flourishes. At last the Corporation has decided to take this great work in hand, and at a meeting last week decided to apply to Parliament for the necessary borrowing powers. The work will entail the construction of an earthen mole, faced with stone, about two miles long, and the estimated cost is about £100,000, but this will, in the opinion of many knowing persons, be far exceeded before the work is complete. As against this expenditure, there will be added to the city an area of over six hundred acres of land which will eventually be of great value for business purposes if the city continues to grow as it is doing. There will also be a saving of a large sum—probably as great as the cost of the proposed reclamation, on new sewage works which have to be constructed to try to mitigate the nuisance by treatment of the crude sewage, if the weed cannot be abolished in any other way. And lastly, there will be a saving of £3,000 a year which is now being spent on gathering and carting away the weed from these slob-lands before it has time to decay, and which has but small effect in abating the nuisance.

Queen's University of Belfast.

At a meeting of the Senate of Queen's University, held last week, a new scheme of scholarships was passed, which greatly increases the inducements for able students, both men and women, to enter the University. There will be forty junior scholarships of £40 each, and nine post-graduate scholarships of £50 each, which may be continued a second year. Five of these will be assigned to arts and four to science. There will be no fixed post-graduate scholarships in medicine, but special grants will be made to suitable applicants who desire to prosecute research or clinical studies. There will also be County Council scholarships, but details of these are not yet ready for publication. The new buildings are progressing rapidly. The enlarged Students' Union buildings were opened last week, the new drill hall for the Officers' Training Corps will be opened in a few days, and the new Medical and Science blocks will be ready for next session.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

TREATMENT OF SKIN CASES BY THE HIGH FREQUENCY VACUUM ELECTRODES.

To the Editor of The Medical Press and Circular.

Sir,—There have been a few dermatological cases reported recently in the medical journals, in which the High Frequency Vacuum Electrodes have been used; in my opinion this method of treatment is not practised so extensively as it deserves to be, seeing that it is easy of application, comforting to the patient, and in experienced hands, generally with signal success. This is my excuse for reporting briefly a few cases picked at random from my note book, which I treated early in the year.

1. *Psoriasis.*—Master D., æt. 16, affected for three or four years all over the body, especially back, sides, legs, forearms and scalp—disappeared after 16 treatments with a medium vacuum tube; Liq. arsenicalis and Tr. Rhei Co. internally, no local application.

2. *Alopecia Areata.*—Mrs. K., æt. 35;—duration four months, four patches each about the size of a five-shilling piece. Hair commenced to grow after third application of high vacuum tube. Seven treatments in all.

3. *Dry Seborrhœa of Scalp.*—Mr. G., æt. 32—duration uncertain. Scalp almost clear after 12 applications of high vacuum electrode, made especially for me by Messrs. Newton and Wright of London, in appearance like a three-pronged fork with small points, thus passing easily through the hair.

4. *Gouty Eczema.*—Mr. C., æt. 65—duration 10 years, legs, arms, head and back, in irregular patches. Appearance normal, except some redness after 10 sittings with low vacuum tube. Dieting, citarin internally, nothing locally.

5. *Psoriasis.*—Miss C., æt. 39—duration two years, on outer sides of arms and legs near elbows and knees. Cleared up entirely after the 12th treatment with a medium vacuum tube. No medicine.

6. *Facial Eczema* (slightly moist)—Mrs. B., æt. 45,—duration three or four weeks. Cucumber juice and glycerine allowed to be used. Well after the third application of a low vacuum tube.

7. *Pruritus perinei.*—Mr. W., æt. 50—suffered as long as could remember, the itching being intolerable at night. No local application had any effect. Relieved after the third application of a medium vacuum tube and condition normal after the eighth treatment.

8. *Chilblains.*—Miss V., æt. 12—always suffered during winter, on hands and feet, on this occasion lasted two weeks. The third application of a medium vacuum tube, permanently relieved.

9. *Chronic Onychiæ.*—Mr. C., æt. 32—duration three months, all fingers. Ung: zinci oleas used locally. Healthy condition restored after four treatments with a fairly high vacuum tube.

10. *Acne Vulgaris.*—Miss K., æt. 18—forehead, cheeks and chin affected for two or three years. Cured after 10 applications of a medium vacuum tube.

Yours truly,
W. A. Griggs.

60, Montpelier Road,
Brighton.
October 30th, 1912.

COTARNINE.

To the Editor of The Medical Press and Circular.

Sir,—During the past five years I have had occasion to prescribe the phthalate of cotarnine for uterine hæmorrhage of many kinds, and in no case did I get good results from the drug until I gave ten grain doses. In one case ten grain doses were given every two hours until twelve were taken, without the least unpleasant result. My rule is to give the drug at intervals of two, three, or four hours, according to the severity of the case. In a few instances the patients complained of nausea, and in all the bitter unpleasant taste of the medicine is adverse to its continued use. As a styptic I found it superior to any therapeutic agent I ever prescribed, and my object in writing is to show that it may be prescribed in much larger doses than those recommended in our ordinary text books. Martindale (*Extra P. ed.* 14) gives the dose as ¾ of a grain; Fortescue-Birkdale gives ¾ to 1½ grain, three to five times daily; König, however, gave 5 grain doses (*Wien. Klin. Woch.*, 1909). Bocquillon's (*Med. News*, 1912) largest dose is 7½ grains daily in deviated doses; and Hare (*Practitioner*, 1912) gives the dose as from ½ grain to 4 grains three times a day.

I am, Sir, yours truly,
George Foy.

Dublin

IRELAND AND THE INSURANCE ACT.

To the Editor of The Medical Press and Circular.

Sir,—In view of the latest pronouncement by Mr. Lloyd George, outlining his present financial attitude towards those members of the medical profession who accept service under the Insurance Act, may I request the hospitality of your columns to make a few suggestions, inasmuch as the situation created by the Chancellor's partial concessions affects the profession in Ireland.

It seems to me that the best, in fact, the only way of ascertaining the trend of Irish medical opinion is by convening a general meeting of our confreres throughout the country, to be held in Dublin at an early date, to which every district, urban and rural, would send a delegate.

At this meeting it might not be inopportune to analyse closely the reasons why the Irish contributor should be denied medical benefit, as the granting of such benefit seems to most thinking people the sole *raison d'être* of this Act. Thanking you in anticipation.

I am, Sir, yours truly,
Thomas C. McGrath.

130, North Strand Road,
Dublin. Oct 29th,

THE MIDWIFE—AN ANACHRONISM.

To the Editor of The Medical Press and Circular.

Sir,—Attention to a parturient woman is one of the most ancient branches of the practice of medicine, and probably owing to its antiquity, still shows a marked example of the survival of the unfit. Obstetrics nowadays, in the hands of competent practitioners, is on a scientific plane, parallel with any other of the healing arts. Unfortunately only a small part of the practice is in the hands of these men. The rest is carried out more or less successfully by midwives, who cannot pretend to the preliminary education and high technical skill that is universally admitted to be absolutely requisite for the efficiency of any branch of the practice of medicine. This duplication of practice is radically wrong; from a misplaced excuse of expediency we have deliberately adopted a standard we know to be ineffective. To argue that a midwife is competent to deal with a large proportion of cases is analogous to encouraging a pharmacist to prescribe for minor ills, and to call in a physician only when the case is obviously beyond him. In an event which civilization has reduced from a physiological function to something not far from a pathological condition, it is illogical to have an untrained—or worse, a half-trained—individual to bear the responsibility of two lives, and only to hand the case over to one able to deal with it when often it is too late. Let us improve our midwives, by all means to the utmost of their capacity—but let us ultimately abolish them. They are an anachronism; if we must have them, let them be competent anachronisms, but the proper treatment of the midwife is not to educate, but to eliminate her.

I am, Sir, Yours truly,
Practitioner.

MR. LLOYD GEORGE'S LAST OFFER.

To the Editor of The Medical Press and Circular.

Sir,—I am in thorough agreement with the views put forward in your leading article of October 30th on the subject of Mr. Lloyd George's recent proposals. They will require the very careful consideration of the profession, and it is of the utmost importance that whatever decision may be arrived at should be loyally carried out by every member of the profession. In forming a decision it is necessary that the proposals of Mr. Lloyd George should be put accurately and clearly before medical men. The Chancellor, himself, whether intentionally or not, has failed to make his proposals quite clear, and I regret to note that in one particular you appear to have been misled by him. Having quoted Mr. Lloyd George, and stated quite accurately the demands of the profession, you remark: "The outcome of the proposals, if we interpret Mr. Lloyd George's proposals correctly, is that medical men are offered a capitation fee of 7s., which in some instances, will be increased to 7s. 6d., that amount to be exclusive of drugs. The first point to be settled is whether 7s. is to be accepted in view of the demand for 8s. 6d."

How is this 7s. arrived at? Mr. George proposes a capitation fee of 6s. 6d. for the medical benefit. The extra 6d. is only got by dragging in the sanatorium benefit, about which there has been, so far, no dispute. The profession has asked for 8s. 6d. plus extras for the medical benefit, not for the medical benefit plus the sanatorium benefit. They are offered 6s. 6d., and 6s. 6d. only, for the medical benefit, and this inclusive of extras.

I am not concerned at present to argue whether this offer should be accepted or not. My object in writing is merely to make its terms clear. Further, whether it be accepted or not, the sanatorium benefit is not affected.

I am, Sir, yours truly,
Hard Times.

November 1st, 1912.

THE ANTISEPTIC TREATMENT OF PHTHISIS.

To the Editor of The Medical Press and Circular.

Sir,—In the report in the *Daily Telegraph*, October 30th, of the case of Stevens v. the British Medical Association, Dr. Acland stated in his evidence that "Every kind of antiseptic had been tried and was ineffective." No antiseptic treatment, as far as I am aware, has been tried in a proper and scientific manner, for when the Reports of the old Pharmacopœia were excluded from recent editions, it is quite clear that the only plan of treating pulmonary diseases on antiseptic principles was abandoned. Medicines taken in the ordinary way, that is into the stomach, can have little or no effect on tubercular phthisis in its active stage. It would be as reasonable for the surgeon to use antiseptic medicines in the hope of preventing the septic troubles that occur in surgical practice. It is by atmospheric influence and that alone, that we can hope for prevention and arrest of pulmonary tuberculosis. Dr. Acland seems to think that everyone is tuberculous, or that "a large proportion of the population was tuberculous at some time or other." The great principle of antiseptic treatment of lung disease has never yet been properly tested, and till it is we shall see no great change in the morbid effects of tuberculosis in this country.

I am, Sir, yours truly,
Robert Lee.

West Drayton, November 2nd, 1912.

OBITUARY.

DR. L. W. D. MAIR, OF LONDON.

By the death, on Sunday last, of Dr. Ludowic William Darra Mair, at the early age of 46, the Local Government Board has lost one of its most distinguished medical inspectors. The deceased, who was the son of Dr. R. Slater Mair, formerly of Madras, was educated privately in London and at Epsom College. He entered St. Bartholomew's Hospital with a scholarship in 1883, and graduated M.D. with Honours at the University of London in 1893. After two years' work at the Coppice Asylum, Nottingham, he entered the Public Health service as Medical Officer of Health of the rural district of Croydon. Here his ability came under special notice at the Local Government Board, and in 1898 Mr. H. Chaplin appointed him a Medical Inspector in that Office. Dr. Mair carried out for his department many important investigations into the ætiology of infectious diseases in different parts of the country, the reports of which have formed valuable contributions to epidemiology, while other reports have had important bearing on the sanitary administration of rural districts. The results of an inquiry on the incidence of disease on the inhabitants of back-to-back houses in Whickham in 1907 led to his being commissioned to make a wider investigation on the subject, which is contained in a special report presented to Parliament in 1910. Dr. Mair served as a member of the Commission appointed by the Irish Local Government Board in 1908 to inquire into the causes of the high mortality of Belfast, and was specially concerned with the discovery of the large scale on which sewage-polluted shellfish had produced enteric fever in that city. He took an important part in the investigation of the outbreak of arsenical poisoning in Lancashire in 1900, and was Chairman of the Departmental Committee on the use of intercepting traps in house drains, which reported this year. Dr. Mair married, in 1894, Edith, daughter of Dr. W. B. Tate, of Nottingham, and is survived by his widow and two daughters.

DR. F. BAGSHAWE, OF ST. LEONARDS-ON-SEA.

We regret to announce the death of Dr. Frederic Bagshawe, J.P., which took place on the 2nd inst., at his residence at 35 Warrior Square, St. Leonards-on-Sea, where he had lived for over 40 years. He was for six years an alderman of the borough, and in 1897-8, the year of the extension of the borough boundaries, he was Mayor. Although nearly eighty years of age, he was actively engaged in his work almost to the last. Dr. Bagshawe came of an old Derbyshire family, his father having been rector of Eyam. He graduated M.B. at Cambridge in 1861, becoming M.D. in 1865, having studied at St. George's Hospital and Cambridge. He became a Fellow of the Royal College of Physicians, London, in 1879. Dr. Bagshawe began to practise at Hastings in 1865, and for many seasons had an important practice on the Riviera. In 1871 he was appointed Assistant Physician to the Hastings and East Sussex Hospital, and was largely concerned in the rebuilding of the Hospital on the circular ward plan. He afterwards became Physician to the hospital. He had held medical appointments at the London Western General Dispensary and at the Hospital for Sick Children, Great Ormond Street. He was a former President of the South-East Branch of the British Medical Association and of the British Balneological and Climatological Society.

REVIEWS OF BOOKS.

TREATMENT OF CURVATURE OF THE SPINE AND FLAT FOOT. (*a*)

This work, of about 130 pages, is intended as a guide to the management and physical training of patients suffering from scoliosis and flat foot. It is not an exhaustive review of the whole subject from a specialist's point of view, but rather confines itself to imparting the kind of information that the general practitioner requires, and should appreciate, when he meets cases which are not too advanced for him to undertake without special study.

Mr. Smith's book is divided into ten chapters, the first of which is historical and introductory. In the following chapters the occurrence and causes of lateral curvature are clearly treated. Chapter IV., on "Analysis of the Deformity," gives an interesting account of some of the author's experiments, to show the important part played by the ribs in causing rotation. The author takes next the Examination of the Spine, and the classification of cases are considered in a practical way. He further explains the "*rationale* and *technique* of Prof. Rudolf Klapp's 'Creeping Exercises,'" which have been found so useful in mobilising the spine and strengthening the muscles attached thereto. Standing, sitting and bench exercises are discussed, and the subsequent chapters are devoted to the consideration of weak ankles, and their treatment by boots, manipulations, and exercises. The final chapter is a judicious addition to the work, on the general treatment of the patients by iron and cod-liver oil.

The book contains 82 figures, which are all good; those illustrating the human form in faulty positions, and while doing corrective exercises, being particularly instructive. We can recommend the work as a convenient and easily assimilated little treatise on the subject.

DR. MURPHY'S CLINICS. (*a*)

We all know that Dr. Murphy, of Chicago, is an able and original operator, and we accordingly look forward with pleasure to reading any work that bears his name. It is not often that we are disappointed. Dr. Murphy is responsible for much of the best American teaching on his own subjects. Still he is not infallible, and this series of Surgical Clinics is one of his mistakes.

A bedside clinic is perhaps the most effective, as it is certainly the most interesting, way of giving students a vivid and living impression of the facts that lie before them, and it is probable that the lectures delivered by Dr. Murphy give benefit well above the average to those who are fortunate enough to hear the spoken word at Mercy Hospital.

But printed verbatim reports of these lectures, with only such illustrations as were handed round the class, are another thing.

It may occur to one that the patient occupies a not altogether unimportant position in a bedside clinic, and some might think him essential. Not so Dr. Murphy.

After giving us the patient's name, occupation, and skiagrams, the rest is left to our imagination. We have every word that falls from the Master's mouth, how he instructs his interne in history-writing, how he answers futile questions, even how he exhibits a praiseworthy niceness in the use of English prepositions, but the condition around which it all centres is utterly and completely disregarded. We have all the minutiæ of detailed comment on a subject that we have no means of visualising and great difficulty in comprehending.

The result is that some of these reports are quite unintelligible. If we had been in the Theatre of Mercy Hospital and had seen and listened to Dr. Murphy as he talked his way through the steps of the operations, we would probably have had an extremely clear picture of what he was doing, but to a reader the discourse is meaningless.

"I am going to make this incision in my flap," "I sew that across here," without any further word of explanation, mean no more than so much blank paper to a man six months and four thousand miles away from the speaker. The pity of it is that there is excellent material in these volumes, but nearly all of it is wasted. It is inconceivable that the author can have bestowed much trouble on these reports from the time they were taken down in shorthand to their issue to the public. Admiration for the stenographer's conscientiousness and exasperation at the carelessness that offers so much and gives so little are the feelings with which we close these books.

BIOLOGICAL PRODUCTS IN MEDICINE. (*b*)

If some still continue to find solid grounds for their ignorant enthusiasm for modernistic revelation in the fact that many so-called "scientists" who pose as apostles of its doctrines find their "master key" in the blessed process of *Evolution*, there are still other some who have come to the conclusion that *Revolution*—vigorous progression in a circular rut, with periodic recurrences to the original starting point—is a term more appropriate to designation of the nature and quality of the degree and direction of the advancement of the science of therapeutics. The appearance of the present volume, and the inspiration which led to its production, furnish a conspicuously clear and, indeed, we believe, convincing item of testimony to the validity of our thesis. For the *opotherapy* of the opening years of the twentieth century appears to be

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(*a*) "Lateral Curvature of the Spine and Flat Foot, and Their Treatment by Exercises." By J. S. Kellett Smith, F.R.C.S.Eng. Pp. 130, 82 Illustrations. Bristol: John Wright and Sons, Ltd. 1911.

(*a*) "The Surgical Clinics of John B. Murphy, M.D., at Mercy Hospital. Chicago." April, June and August, 1912. Philadelphia: W. B. Saunders Company. 1912. Price 35s. per annum.

(*b*) "Les Products Biologiques Medicinaux." By P. Byla et B. Delaunay. Paris: Societe d'Editions Scientifiques et Medicales, F. Gittler. 1912.

regarded by the average practitioner of the present day, as it unquestionably is by the average intelligent non-medical citizen, as a relatively novel result of the most *modern* therapeutic research. And yet the plain, unvarnished fact is that this method of patching up the rents attributable to infirmities of the flesh, and supporting the functional weaknesses of failing organs, is one of the very oldest known to the annals of the art of healing. And, when we come to consider the subject with some special care, nothing can be regarded as more natural—having due respect to the inherent defects of the undisciplined human understanding—than that such should be the case. The Anglo-Saxon physician of the present generation has proved himself slow in adopting the methods of "organo-therapy," because his therapeutic armamentarium was originally furnished on absolutely uncongenial principles. Even at an early stage in the multiplication of the human race, the more stolid and long-suffering were allowed to function as tillers of the soil; while the more intellectually accomplished had secured the position of a recognised hierarchy, one of the special perquisites of which was the receipt of the more savoury and sustaining tit-bits derivable from the animal kingdom. Wizard—or witch-finder, medicine-man—or rain-maker, prophet—or priest; the representative champion of the natural supremacy of mind over matter—adapted his weapons for mental conquest to the collective intelligence and "evolutionary" status of the community in which he had been providentially called to exercise his functions and display his special skill. Thus the priestly adviser of the primitive tribe secured for himself the most desirable of its animals for propitiatory sacrifice—and used the most savoury and nutritious of their organs—and special anatomical areas—for his personal consumption. He was the only *expert* who had cultivated special skill, beneath the common area of "surface anatomy;" and he had studied the nutritional properties of the various portions of the animal body in a way that no other member of the tribe could pretend to have done. And the "natural" verisimilitude of the view of the adaptability of the substance of any of the various organs of the animal body to the reinforcement of the corresponding ones of the human organism which had come to display evidence of functional failure, would surely appeal to the judgment of "the general" with incontrovertible force. What could be more natural than that assimilation of the digested cardiac tissues of the "King of Beasts" should restore to the failing cardiac organ of man or woman a *quantum* of the exuberant strength which had conferred upon its former owner his proverbial power and dignity. The view cannot safely be scoffed at by the advocates of the *thyroid* and *suprarenal* preparations of the present day, surely. This highly rationalised code of special therapeutics retained its force of appeal throughout prehistoric antiquity, and down through the classic ages. It was even reinforced in the mediæval centuries, when it became endowed with occult attractiveness. It was not by any means wholly rejected with the dawn of modern scientific enlightenment and research; as the colossal encyclopædia of Matthiolus, the "father of modern therapeutics," well shows. It faded with the tidal wave movement of chemistry and physiology in the mid-decades of the nineteenth century, and the first great step towards its resurrection was displayed in the employment of cod-liver oil as *the* cure for pulmonary consumption. The most obvious change in the consumptive's physique was loss of fat; the obvious indication of the treatment was to replace it; and an early discovery of physiological chemistry was that cod-liver oil saponified more readily in alkaline solutions than other fats.

The authors of the interesting volume before us deserve the full credit of treating the subject of *opotherapy* from the point of view of the most modern science; and the information given regarding the composition, properties, and (real or fancied) therapeutic powers of ferments, albuminoids, lipoids, etc., make highly instructive and suggestive reading.

SPRUE. (*a*)

The appearance of this neat volume is quite opportune, as a commission started for Ceylon but a few months ago, for the purpose of unravelling, as far as possible, the tangled problems presented by the disease of which the author here undertakes to give his readers the benefit of a prolonged and exceptional experience. The author regards the troublesome and inveterate (so-called) tropical diarrhœa as sprue itself. And having regard to the usually hopeless nature of this condition, when allowed to remain unchecked at the onset, he is specially emphatic in his warnings, and his reiteration of the vital importance of promptitude: "Let the first indication of troubled bowels, from whatever cause, be instantly treated on the lines of purification, just as would be done with suspected drains in a house. Apply germicides long before the invader has had time to entrench himself and obtain the shelter from which it becomes increasingly difficult to dislodge him. If this were the rule, I go so far as to believe that English consultants would never find a case of chronic sprue in their waiting-rooms." And immediately following this statement—which, we must remark, is made with the confidence of a skilled and earnest observer, anxiously embracing the opportunity of conveying truth with emphasis, rather than with the sonorous enunciation of the pretentious quack—he unfolds the secret of his success. "After I had found out the value of santonin I never had to invalid a patient home during the thirteen years I still continued to practise in China. Interesting (and hopeful) it is to notice that this addition to our small stock of *specific* remedies, thus comes from the far Eastern territory, which anticipated us by several thousands of years with its gunpowder, and block-printing, and marine compass, and surface anatomy."

The approximate uniformity of the malignant attack on the mucous lining of the whole alimentary canal is well portrayed by our author, both by descriptive text and reproductive illustration. The bacteriology of the disease does not, however, appear to be finally settled, at least as regards nomenclature, although thirteen distinct varieties of organisms have been isolated from a "single drop of fluid motion," and "one variety of bacillus behaved in a destructive manner." But "the most marked sign of active sprue is the contractive condition of the liver, yet nothing has been found *post mortem* to account for this." The most important of all points of view in serious disease is, however, that of the therapeutist; and if we have a specific agent in santonin the great question is answered once and for all. But its use requires special precautions. The discovery of the value of santonin was made by the author when "using a bottle of the drug which had been exposed to the tropical sunshine of China for over fourteen years." And he warns the reader (in italic type) that "the white drug is absolutely useless in sprue, and its value increases directly as the colour changes."

TREATISE ON TREATMENT. (*b*)

There are certainly better and worse treatises on treatment in the market than this Indian production, which consists for the most part of a collection of recipes and advice culled from various medical journals. There are several misprints and mistakes. Thus "Lint Iodine" (p. 23) is not very good Latin, and, besides, the present B.P. preparation is the liq. Iodi fortis, not the linimentum. "Extr. nucis vomica liq." (p. 22) is also bad form. Then, again, what are "Chloral Amid." (p. 28), "Oil Recini" (p. 305), "Lethium formate" (p. 569), and so on? Dr. Bramwell, of Edinburgh, is raised to the Professorship on p. 555! Nor do we like the method the author adopts of advertising his book in a circular which

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(*a*) "Sprue: Its Diagnosis and Treatment." By Charles Begg, M.B., C.M.Edin., Formerly Medical Officer, Chinese Imperial Maritime Customs, and H.B.M. Medical Officer, Hankow, China. Pp. 124. Illustrated. Bristol: John Wright and Sons, Ltd. 1912. Price 6s. net.

(*b*) "A Treatise on Treatment." By Jogender Lal Chundra, L.M.S., Calcutta University. Calcutta: 5, Gopee Kristo. Paul's Lane. 1911.

accompanies our review copy. Altogether our task was rather a difficult one on this occasion on account of the strong odour of naphtha which emanated from the volume, the reason for which was not quite apparent. We hope Sir William Broadbent would not object to the spelling of his name on p. 377. We strongly advise the author to secure the services of a good proof reader when next he appears in print.

MEDICAL NEWS IN BRIEF.

The Lord Mayor's Dinner Party.

The Lord Mayor gave a dinner party at the Mansion House last week to meet Sir Thomas Barlow, the President of the Royal College of Physicians, and Sir Rickman Godlee, the President of the Royal College of Surgeons.

Among the guests were Sir Douglas Powell, Sir William Church, Sir William Osler, Sir Clifford Allbutt, Sir Lauder Brunton, Sir Frederick Treves, Sir Dyce Duckworth, Sir Henry Morris, Sir Francis Champneys, Sir James Porter, Sir Watson Cheyne, Sir James Goodhart, Sir Anthony Bowlby, Sir J. Rose Bradford, Sir Malcolm Morris, Sir George Savage, Sir Edward Busk, Sir Robert Morant, Sir William Bennett, Sir John Tweedy, Sir A. Piarce Gould, Sir Cooper Perry, Sir John Broadbent, Sir Frederick Hewitt, Sir Shirley Murphy, Sir Henry Miers, Sir William Collins, Sir Anderson Critchett, Dr. Léon Blanc, Mayor of Aix-les-Bains, Dr. Herringham, Vice-Chancellor of the University of London, and Dr. Bramley Taylor, Master of the Society of Apothecaries.

Friendly Societies in Dublin.

Speaking at a meeting in Dublin of the Friendly Societies' Union, Mr. J. D. Nugent, P.L.G., referring to the institution of the Union as a result of the extraordinary demand by medical officers of the friendly societies, said that the Union should become a permanent institution, which, when the medical question had been settled, would be beneficial alike to members and officers of the various societies.

The Chancellor of the Exchequer's recent statement did not, in Mr. Nugent's view, alter the situation very much, because, not having medical benefits in Ireland, the whole of the doctor's fees would have to be paid by the individual member through the benefit society. As to the proposal that the Friendly Societies' Union act in the capacity of medical committee, and receive a capitation grant of 5s. and employ doctors to do the work, it would be no infringement of their compact for doctors to accept salary. Apart from two offers from Dublin doctors, an Association in Scotland was willing to send Irish doctors across to take up salaried duty. He was informed by the Insurance Commission that approved societies could dispense with medical certificates and accept the recommendation of their health visitors. The establishment of a Municipal Hospital would solve the hospital crux. He would oppose the application of medical benefits to Ireland unless it covers the wife and dependent children under 16 years of the insured person.

A resolution was adopted for the payment of the 5s. capitation grant into the Union, with authority to employ doctors on salary; and it was agreed that medical benefits should not be extended to Ireland except on the principle mentioned by Mr. Nugent.

State Medical Service Association.

The first general meeting of this Association, inaugurated at Liverpool in July last, was held in London on October 25th. The secretary reported that as a result of sending out 625 circulars 135 medical men had become members, and a few laymen. The chairman, Professor Benjamin Moore, laid stress on the fact that the great aim of the Association was gradually to educate the medical profession and the public to the need of a State Medical Service which should put professional advice at the ready disposal of every member of the community who needed it, with a view to the prevention of disease.

An executive committee was appointed, with Dr. G. A. Heron as chairman, and arrangements were made for the formation of district branches. Negotiations for the issue of a weekly journal, as the official organ of the Association, to be entitled *The Medical World*, were satisfactorily completed. All communications should be addressed to the Hon. Sec., Charles A. Parker, Esq., F.R.C.S., 24, Upper Wimpole Street, W.

Mental Deficiency Bill.

The following resolutions have been passed by the Conjoint Committee of the B.M.A. and I.M.A.:—

That every effort should be made to have Ireland included in the scope of the Mental Deficiency Bill now before Parliament."

"The report of the Royal Commission on the Feeble Minded shows clearly that it is more urgently required in Ireland than in Great Britain. Should Ireland be excluded from it a large sum of money will be lost to this country."

New University College Buildings, Dublin.

Last week the Governing Body of University College, Dublin, made known the fact that they had confirmed the assessor's award, and accepted the designs of Mr. R. M. Butler for the proposed new buildings of the University, which are to be erected on the site of the old Royal University at Earlsfort Terrace, Dublin. In accordance with Mr. Butler's plans, a new façade, with a projecting portico, will be erected forty feet in front of the present structure, and will extend similarly along the Hatch street frontage and the northern frontage. The rear of this new building will abut on what remains of the present structure when the existing front has been removed, so as to allow the present great hall, convocation hall, and other adjoining rooms to form an integral part for the present of the new structure. It will thus be seen that the existing buildings will be enveloped by the new structure, and a pleasing prospect presented. Eventually the old buildings will be removed and the new building completed according to the design by a back line of buildings running parallel to the new front, and connecting the two wings, thus forming a square. A central line of buildings will divide the enclosed space into two quadrangles. This axial line of buildings will contain an assembly hall, library, and a large college theatre with annexes. The façade facing Earlsfort Terrace will be 512 feet long, and that facing Hatch Street 272 feet. The building will be about 68 feet high. It will be surrounded by an open space of about 40 feet wide. It is proposed to proceed, in the first instance, with a portion only of the entire scheme. The cost of this portion is not to exceed £95,000. The cost of the entire scheme is not to exceed £160,000. The design was frankly based upon the work of the eighteenth century, as exemplified in the public buildings of Dublin.

A Death from Veronal.

The death of Mr. Thomas Shaw (45), the London dramatic agent, formed the subject of an inquest at Kingston last week. It was stated that he had been in the habit of taking veronal tabloids to induce sleep, and that after taking some on Friday night he died the following morning.

Mrs. Shaw told the Coroner that her husband usually took two tabloids at a time, but between Thursday night and Friday night he took no fewer than ten. This said the Coroner, represented 50 grains. He went on to point out that what might be a safe dose at one time might not prove so after an interval. It was stated that veronal could be bought as easily as soap. Death was due to heart failure, accelerated by veronal poisoning. A verdict of "Death from misadventure" was returned.

Dr. Burke-Savage Memorial Fund.

The following appeal has been issued:—

The death of Dr. Matthew Burke-Savage has created a deep feeling of sorrow amongst a great number of friends to whom he had endeared himself by his many sterling qualities. His brilliant professional gifts had won for him a foremost place in public estimation, whilst his kindness of heart and his warm interest in the welfare of others had gained him a place in the hearts of many, who deeply deplore his loss. He had devoted himself with such single-mindedness and self-sacrifice to the well-being of others—totally forgetful of his own material interests—that he failed to make adequate provision for the young and helpless family whom he loved so well. A committee has been formed to appeal on their behalf to the generosity of the many who knew and appreciated Dr. Savage for his many great qualities, and, not least, for his life-long devotion to the poor.

(Signed) MICHAEL F. COX, *President.*
J. S. M'ARDLE,
J. S. WILSON,
Hon. Treasurers.
DENIS KENNEDY, *Hon. Secretary.*

Subscriptions will be received by the Hon. Treasurers, Gresham Hotel, or at the Belfast Bank, 86, Talbot Street, Dublin.

Royal College of Physicians of London.

Lectures.—Dr. Raymond Crawfurd will deliver the FitzPatrick Lectures on "The History of Medicine" on November 7, 12, 14 and 19, the subject being "Echoes of Pestilence in Literature and Art." The first lecture will be entitled "To the Great Antonine Plague," the second "To the Black Death," the third "To the Great Plague of Milan," and the last "To the End of the Eighteenth Century"

The Horace Dobell Lecture by Dr. C. J. Martin on "Insect Porters of Bacterial Infection" will be delivered on Thursday, November 21.

Institutions Recognised.—On the recommendation of the Committee of Management of the Examining Board in England, the following schools were added to the list of institutions recognised by the Board for instruction in biology:—West Bromwich Municipal Secondary School and King Edward's School, Birmingham. In chemistry and physics:—Leamington Spa Municipal Technical School and King William's School, Castletown, Isle of Man. The Naval Medical College at Greenwich was added to the list of laboratories recognised for the course of instruction for the diploma in public health, and the East Ham Borough Isolation Hospital to the list of fever hospitals. Dr. Norman Moore was elected a member of the Committee of Management of the Examining Board in England.

At the quarterly meeting of the Council on Thursday last, the following new members and licentiates were admitted:—To be members of the College (M.R.C.P.):—J. Davis Barris, M.B.Camb., F.R.C.S., L.R.C.P., St. Barth., and A. N. Contractor, M.D.Lond., L.R.C.P., and M.R.C.S., of Univ. Coll., Lond.

To be Licentiates (L.R.C.P.):—A. Ashmore, E. Bach, N. K. Bal (Bombay), H. R. Bastard, G. E. Beaumont, P. L. T. Bennett, L. G. Bourdillon, R. St. L. Brockman, R. G. Brown, E. N. Butler, L. T. Challenor, P. C. Cole, L. G. Grossman, K. F. R. Davison, A. E. L. Devonald, G. R. Dobrashian, S. Daraisamy (Madras), F. N. Doubleday, F. P. Duncan, W. J. I. Dwyer, T. L. Ellis, M. S. Esler, B. C. Ewens, E. G. Fisher, W. B. Foley, W. K. Fry, V. Gabriel (Ceylon), G. E. Genge-Andrews, D. M. Gibson, R. S. Graham, J. Greene, M. J. Haffey, D. B. I. Hallett, W. J. Hart, H. Harvey, H. J. B. Heelas, C. Helm, H. J. Hoby (New Zealand), R. L. Horton, D. E. J. S. Hughes, A. Jackson, E. B. Jardine, D. D. B. Jay, H. W. Jones, R. A. Jones, S. Keith, C. Kennedy, W. J. T. Kimber, G. A. M. Leopold (Tubingen, T. P. Lewis, J. B. Lowe, W. C. D. Maile, C. C. Marshall (Melbourne), L. A. Martin, G. O. Maw, J. N. Mehta (London), N. M. Mehta (Bombay), R. H. Miller, G. W. Mitchell, S. G. Papadopoulos, S. G. Platts, E. G. Reeve, W. R. Reynell, J. F. G. Richards, I. Ridge-Jones, G. H. Roberts, W. Robinson, H. C. Rook, G. A. Russell, C. M. Ryley, J. G. Saner, R. Saravanamuttu (Madras), F. R. Scott (Toronto), A. S. Seabrooke, H. N. Sealy, W. J. D. Smyth, J. B. Stringer, A. L. Sutcliffe, W. F. Thompson, H. E. Thorn, W. C. Toll (Toronto), D. B. Truman, C. R. B. von Braun, J. R. Waddy, G. A. Walker, H. Walker, J. F. Ward, M. H. Watney, W. G. Watson, W. L. Webb, H. N. Webber, G. J. Whetham (Toronto), A. Wilson, E. Wordley and A. M. Zamora.

A diploma in tropical medicine was granted jointly with the Royal College of Surgeons to Eric S. Marshall, L.R.C.P., M.R.C.S., of St. Bartholomew's and the School of Tropical Medical.

Royal Colleges of Physicians and of Surgeons of Edinburgh and Royal Faculty of Physicians and Surgeons of Glasgow.

At the quarterly examinations of the above Board, held in Edinburgh, which were concluded on October 26th, five candidates passed the First Examination, twelve passed the Second Examination, eleven the Third Examination, and the following candidates passed the Final Examination, and were admitted L.R.C.P.E., L.R.C.S.E., L.R.F.P., and S.G.:—Alfred G. Cowper, Bombay; James McFarlane, Jarrow-on-Tyne; Dodballapur S. Puttanna, Dodballapur; Narain R. Ubhaya, Mangalore, India; William Martin, Ballynahinch; Eslyn Marcar, India; William Watson, co. Tyrone; Alexander D'Sousa, Bombay; Charles J. L. Patch, Madras; Hamilton Mathewson, co. Tyrone; Walter Lessey, Grenada; Hormusji S. Dastur, Broach, India; Verdon C. H. Dearden, Sheffield; and John I. Arnold, co. Wexford; 4 also passed in Medicine, 3 in Surgery, 6 in Midwifery, and 9 in Medical Jurisprudence and Public Health.

University College, Dublin—College Scholarships.

Faculty of Medicine.—Second year (£30) each)—Thomas J. X. Canton; John J. Cowley and John A. O'Tierney, ex æq.; Mary J. Farrell. Third year (£30 each)—Francis de C. Keogh, Elizabeth M. J. Kelly, John J. Cremin, James B. Magennis, Charles I. Hannigan. Prizes (£15 each)—Edmund F. Higgins, James P. Moriarty. Fourth Year (£30 each)—John G. J. Green, Michael M. Davitt, Edward T. Freeman, Arthur H. Flannery, Thomas J. Costello, Mary C. M'Kenna. Prizes (£15 each)—Michael M'Keever, John A. Sellars. Prize (£10)—Edward P. Carey. Fifth Year (£30 each)—John E. Harford, Evelyne Noble. Prizes (£15 each)—Keiran M'Grath, Richard B. Hennessy.

Trinity College, Dublin.

Michaelmas Term, 1912.—The following candidates have passed the Final Medical Examination:—Part I.: Frederick C. Fleming, passed on high marks; Joseph C. A. McCalden, John G. Butt, Blacker C. Powell, Herbert E. Murray, George B. Hadden, William R. L. Waters, Quentin V. B. Wallace, John S. Dockrill, William Foot, William A. Ryan, Robert W. Chapman, and Arthur N. Brady.

Diploma in Public Health.—Part I.: Francis R. Coppinger; Part II.: Francis R. Coppinger.

Intermediate Medical Examination.—Part II.—The following candidates have passed:—Eric Lumley, James C. McWalter, George H. Wood, Bertram Sheridan, Frank Healy, Maurice King, and Joseph P. Quinn.

Preliminary Scientific Medical Examination.—Chemistry and Physics.—The following candidates have passed:—Thomas P. Chapman, Robert Ramsay, Alan Grimbly, John McClelland, William McClintock, Charles Comerford, Thomas Roche, John Westby, Cecil Keller, Thomas Lane, Edward Lipman, Rupert Gordon, Mortimer McGee-Russell, Frank Ferguson, Philip Hall, Alfred Price, Benjamin Merrin, Henry O'Kelly, John E. Hill, Cyril Littledale, and James Leahy.

Botany and Zoology.—The following candidates have passed:—Eric Beatty, John Westby, Charles Herbert, Sydney Furlong, Meta Jackson, Francis O'Connor, Margaret Wolfe, William Colhoun, Marie Hadden, Thomas Dorman, and Roney Patterson.

Preliminary Scientific Dental Examination.—Chemistry and Physics.—The following candidate has passed:—Mary de Sales Magennis.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

IMPORTANT MUNICIPAL VACANCIES.

Two vacancies of more than usual importance will be found in the advertisement columns of our present issue. One is the appointment of Medical Officer of Health for the City of London, at a salary of £1,000 per annum, applications to be delivered before the 11th inst. The other is an appointment as School Medical Officer, under the Education Authority of the City of Liverpool. Applications must be lodged before the 15th inst.

"SEMPER PARATUM" (Colchester).—The fact of the disappearance of cutaneous lesions, when symmetrical, after vigorous mechano-therapeutic treatment has been applied to one side only is not unknown. Quite recently Delbanco, of Hamburg, has reported the rapid involution of common warts upon the back of both hands after the application of X-rays to one hand only. Other observers have noted a similar disappearance of symmetrical psoriatic and eczematous patches after treatment of one side only by the solid carbon dioxide.

THE HEALTH OF LONDON SCHOOL CHILDREN.

THE scheme for the medical treatment of London school children during 1912-13, which is proposed by the Children's Care (Central) Sub-Committee, provides for the treatment of 48,613 defects, or, omitting minor ailments of 39,238 defects. During the year ended December 31, 1911, the total number of eye, ear, nose and throat defects and ringworm cases was approximately 65,000, and during the year ended July 31st, 1912, 60,000.

DR. P. A. (London, E.).—We understand that a school of mother-craft, having similar aims to the one you mention, has just been started at the Acton creche by Dr. Lilian E. Wilson, Assistant Medical Officer of Health for Acton. Real babies are to take the place of dolls as subjects, so that the results of the intended tuition should reach a higher standard of perfection than would be obtainable otherwise.

TUBERCULOSIS IN MIDDLESEX.

AT the last meeting of the Middlesex Insurance Committee at Caxton Hall it was stated that the total number of applications for sanatorium benefit already received was 100—78 from men and 22 from women—and that the estimated expenditure in respect of the applications which had been acceded to was about £450.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, NOVEMBER 6TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OPHTHALMOLOGY) (1 Wimpole Street, W.).—8 p.m. Cases and specimens by Mr. J. Herbert Fisher, Mr. N. Bishop Harman. Papers by Mr. E. Nettleship, Dr. A. Hugh Thompson, Mr. A. W. Ormond, Dr. G. Coats.

MEDICO-LEGAL SOCIETY AND LIFE ASSURANCE MEDICAL OFFICERS' ASSOCIATION (11, Chandos Street, Cavendish Square, W.).—5.30 p.m. Joint meeting to discuss medico-legal problems arising out of the National Insurance Act.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan). 5.30 p.m.: Eye Operations (Mr. Brooks).

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5.30 p.m. Mr. J. F. Colyer: Specimens illustrating Periodontal Disease (Pyorrhœa Alveoraris) as seen in man, wild animals in captivity and domesticated animals. (Museum demonstration.)

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton, S.W.).—4.30 p.m. Sir James K. Fowler, K.C.V.O.: The Symptomatology of Pulmonary Tuberculosis.

THURSDAY, NOVEMBER 7TH.

ROYAL SOCIETY (Burlington House, London, W.).—Mr. L. V. King, Dr. P. E. Shaw, Mr. E. M. Stubbs and Dr. E. B. R. Prideaux, Mr. C. Smith, Hon. R. J. Strutt, Mr. F. W. Aston, Mr. A. Campbell, Mr. A. Mallock, Sir W. de W. Abney, K.C.B.

ROYAL SOCIETY OF MEDICINE (SECTION OF OBSTETRICS AND GYNÆCOLOGY (1 Wimpole Street, W.).—8 p.m. Short communications by Dr. Drummond Maxwell, Dr. Russell Andrews, Dr. C. Hubert Roberts. Paper by Dr. J. M. Wyatt: Le Fort's Operation for Prolapse—Report of Eight Cases.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton, S.W.).—4.30 p.m. Sir William Osler, Bart.: Acute Tuberculous Pneumonia.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5.30 p.m.: Gynæcological operations (Dr. A. E. Giles). Clinics: Medical out-patient (Dr. A. J. Whiting); surgical (Mr. Carson). 3 p.m. Medical in-patient (Dr. G. P. Chappel).

FRIDAY, NOVEMBER 8TH.

ROYAL SOCIETY OF MEDICINE (CLINICAL SECTION) (1 Wimpole Street, W.).—8.30 p.m. Cases by Mr. Donald Armour, Dr. M. A. Cassidy, Dr. J. Galloway, and others.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton, S.W.).—4.30 p.m. Sir T. Clifford Allbutt, K.C.B.: Pleurisy in Relation to Pulmonary Tuberculosis.

MONDAY, NOVEMBER 11TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8.30 p.m. Discussion on "Respiratory Neuroses," to be introduced by Dr. Samuel West. The following will also take part in the discussion: Sir David Ferrier, F.R.S., Dr. Risien Russell, Dr. Hector Mackenzie, Dr. Leonard Guthrie, Dr. Farquhar Buzzard and Dr. F. E. Batten.

TUESDAY, NOVEMBER 12TH.

CHELSEA CLINICAL SOCIETY (St. George's Hospital), S.W.).—Meeting 8.30 p.m.: Papers: (1) Dr. Leonard Colebrook, "Pneumothorax Treatment of Phthisis," illustrated by X-ray photos and charts. (2) Dr. David Walsh, "Diseases of the Skin in Relation to Cardio-Vascular Disturbances.

Appointments.

BUSHNELL, FRANK GEORGE, M.D.Lond., D.P.H.Camb., Tuberculosis Officer to the Essex County Council.

COWEN, T. P., M.D.Lond., Medical Officer at Rainhill Asylum.

HUGHES, E. E., F.R.C.S.Eng., Surgical Registrar to the Manchester Royal Infirmary.

KHAN, M. M., M.R.C.S., L.R.C.P.Lond., House Physician at University College Hospital.

LISCOMBE, R. H., M.R.C.S., L.R.C.P.Lond., House Surgeon at University College Hospital.

SCOTT JAMES M., M.B., Ch.B.Glasg., Medical Officer at the Central Branch of the Manchester Royal Infirmary.

Vacancies.

Newcastle-on-Tyne, Dispensary.—Visiting Medical Assistant. Salary £160 per annum. Applications to the Honorary Secretary, Joseph Carr, Chartered Accountant, 26 Mosley Street, Newcastle-upon-Tyne.

Caterham Asylum.—Third Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent, Caterham Asylum, Caterham-Surrey.

Corporation of London.—Medical Officer of Health. Salary £1,000 per annum. Applications to the Town Clerk on or before November 11th. (See advt.)

House of Recovery and Fever Hospital, Dublin.—Resident Medical Officer. Salary £50 per annum, with board. Immediate application to the Medical Superintendent, John Marshall Day. (See advt.)

City of Liverpool Education Committee.—School Medical Officer. Salary £250 per annum. Applications to be forwarded before November 15th to Edward R. Pickmere, Town Clerk and Clerk to the Local Education Authority. (See advt.)

Marriages.

CRUICKSHANK—JENKINS.—On November 2nd, at the church of St. Michael and All Angels, Colombo, Captain James Alexander Cruickshank, I.M.S., son of Dr. Brodie Cruickshank and Mrs. Cruickshank, Maida Place, Nairn, to Dorothea Margaret, only daughter of James Graham Jenkins, J.P., and Mrs. Jenkins, Airedale, Cambuslang, Lanarkshire.

GROGAN—STANLEY.—On October 29th, at St. Gabriel's Church, Warwick Square, Captain John B. Grogan, R.A.M.C., son of Mr. and Mrs. Mulligan, of Courtrai, Belgium, to Betty, daughter of the late Major Edward Stanley, North Stafford Regiment, of Rhoscrowther, Pembrokeshire.

Deaths

BAGSHAWE.—On November 2nd, at 35 Warrior Square, St. Leonards-on-Sea, Frederick Bagshawe, M.D., F.R.C.P., J.P., aged 78.

MAIR.—On November 4th, in London, after an operation, Ludovic William Darra Mair, of Stone Court, Carshalton, M.D., (Lond.), Medical Inspector (Local Government Board), eldest son of Robert Slater Mair, M.D., of 14 Pembridge Villas, W., aged 46.

MORSE.—On October 28th, at Fowey, Sydney Morse, L.R.C.P., L.R.C.S., son of the late A. C. Morse, of Crewkerne, Somerset, aged 54.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, NOVEMBER 13, 1912. No. 20.

NOTES AND COMMENTS.

The Irish Advisory Committee and the Medical Benefit.

THE fact that Mr. Lloyd George has promised to find more money for the working of the Insurance Act in Great Britain has naturally raised some feeling in Ireland at the unfair treatment to which she is subjected in the matter. It is held that a proportionate sum should be provided for Ireland, and those in favour of medical benefits think that the present is a good opportunity to press for their extension to that country. The Irish Advisory Committee met last week, and adopted a resolution in favour of the extension of the medical benefit. A public agitation to the same effect is being actively organised. The debate at the meeting of the Advisory Committee, which led up to the adoption of the resolution, was of considerable interest. The suggestion was seriously put forward by one friendly society representative that in any extension of the medical benefit to Ireland the dependents of the insured person should be included. In this view he obtained the concurrence of a medical member of the Committee, with regard to whose position and opinions we shall have something to say presently. As no one expects that more money will be available in Ireland than in England it appears obvious that an Irish medical man is expected to attend a family for the same rate as an English medical man is to attend an individual. A further simple solution of the question of the administration of medical benefits was offered. It was that every insured person should be regarded as a "poor person," and, therefore, entitled to medical attendance under the poor law system. The insurance card should take the place of the familiar red or black ticket! The medical profession of Ireland has not as yet expressed its opinion either for or against the medical benefit. If, however, it consents to work the benefit, it must be a genuine system, and not a bastard production, such as was suggested by various members of the Advisory Committee last week, apparently with the consent of some of their medical colleagues.

Medical Members of the Irish Advisory Committee.

IT is with considerable regret we find that the Irish Insurance Commissioners have been able to fill the places of those medical members of the Irish Advisory Committee who resigned some months ago as part of the general policy of the British Medical Association. The gentlemen who have now accepted seats apparently think that their individual action is of more importance to the public than would be the united action of the medical profession The Right Hon. Dr. Cox, one of the original members, is still a member of the Irish Advisory Committee. He took credit at the meeting of the Advisory Committee for the fact that he had refused the request of the Association to retire from the Committee. It is well to make it quite clear that in no way do these gentlemen represent the opinions or views of the profession. Indeed, when we study Dr. Cox's reported utterances we find him somewhat strong in emphasising his difference from his brethren. He originated the suggestion quoted above, of including dependents in the medical benefit, and this without any additional money being available in Ireland above what may be provided for the rest of the kingdom. In a peculiarly unpleasant phrase, Dr. Cox dissociated himself from the policy decided on by the profession. "For one, his hands were clean and his tongue was clean and his pen was clean in this matter." This can only mean that the policy of his professional brethren is dirty! It is worth while examining whether Dr. Cox has always kept himself so aloof. We understand that he signed the same undertaking as the rest of the profession in Dublin, and that he sent a message to the general meeting of the profession in Dublin, a few weeks ago, regretting his inability to be present. To most people this would appear to show that Dr. Cox was a participator in the general policy of the profession. It is, we think, unfortunate that his dissent should first be made known at a meeting where he is wrongly regarded as representing the medical profession.

Infantile Mortality under the Poor Law.

DR. C. THACKRAY PARSONS, in the current number of *The Poor Law Officers' Journal,* discusses the "uninformed abuse of the Poor Law treatment of children" lately expressed by some members of Bradford City Council. Dr. Parsons examines the one definite charge—viz., that the infantile death-rate in workhouses is between two and three times as high as in large cities. He points out that the death rates for the first two weeks of life in the workhouse and in the general population can be compared accurately. The Local Government Board has published the figures as regards the Metropolitan Unions for the last two years. In 1910, 2,968 live births took place in the maternity wards of these unions, and 120 of these infants died within two weeks—a death-rate of 40.4 per 1,000. In 1911 there were 2,712 births and 119 deaths—a death-rate of 43.8 per 1,000. The death rate in the general population for these two weeks in 1910 was 29.5 per 1,000 (the figures for 1911 are not yet available), so that the death-rate, instead of being two or three times as much, is really about one-and-a-third as much. Dr. Parsons affirms that the reason for this increase is perfectly obvious to those that know the conditions of the mothers who come to the Poor Law maternity wards for delivery.

A Scientific Study of Fools.

It is well that society is waking up to the necessity of gauging and standardising the human mind. Those who are interested in this subject—and what medical man is not—should read an interesting article by Edwin Brewster in the November issue of *The World's Work*. Under the title "A Scientific Study of Fools," the conclusions of the French physiologist, Binet, are discussed. As many of our readers probably know, his main practical advance was the Binet-Simon test, whereby he measured the inherent native intelligence, irrespective of the results of training. His tests are so arranged that they demonstrate the degree of mental development arrived at in the individual, for instance, that normal to a child of three, four, six, eight and so on. If the mental development be arrested at three the body goes on growing but the mind is that of an idiot. The child of ten may have the mind of six years; the child of fourteen that of seven or ten; while the grown-up individual never gets any further than the stage of arrest. The tests are most interesting. The average person, upon hearsay, can immediately repeat seven figures, those of extra mental powers eight or even nine. At twelve a child should retain seven figures; at ten, six; below eight, four; at four, three; at three, two.

Oslerising.

The following simple test is well worth trying. Below seven years a child will not notice that the figure of a lady, otherwise well drawn, lacks arms. Up to eleven he does not cavill at the story that you have locked yourself in your room and could not get out because you left the key on the outside. The practical applications of this new science are likely to be of distinct sociological value. The scientific study of the mind has been formally inaugurated, for the first time in the history of the world, at the training school for backward and feeble-minded children at Vineland, New Jersey, fifty miles south of Philadelphia. It seems that no amount of training develops a mind beyond the stage at which it has become arrested. The average mind appears to have reached the top of its growth at about twenty, or a few years later; good minds go on to forty, the time fixed for the limit in medical men by Professor Osler. Mr. Brewster adopts the term "oslerising" to mark the point of cessation of mental growth. Thus the idiot oslerises at three; the feeble-minded at seven, eight, ten or somewhere short of the normal. He has the body of the adult but the brain of the child. Some of the latter go through life just able to earn a living, but with feeble control over a man's natural impulses.

The Bottom of the Social Problem.

Out of a group of one hundred juvenile delinquents taken at random, only one was found to be as old in mind as in body—the only normal child in the lot. Six boys of thirteen years tested only nine; twenty-six of fourteen tested only ten; twenty of fourteen tested nine; eighteen of fifteen and sixteen averaged under nine. Such results as these suggest a humane revision of our methods of criminal administration all over the world. One striking case at Vineland was that of a strong, well set up young man of twenty, who led the school orchestra, took part in theatricals, worked in two handicrafts, was a crack athlete, and altogether a pleasing personality. Examination in the laboratory, however, revealed the mind of a boy of thirteen. In the outside world he would be unable to look after himself and would inevitably drift into pauperism or crime. Out of fifty-six wayward girls, again, only four were found mentally normal. The name "morose" is applied to the unfortunate individual who has escaped idiocy on the one hand, but whose mental growth has been prematurely arrested on the other. The medical man who carries the main principles of the Binet system in his mind will find plenty of field for their application in practice. We fancy Mr. Brewster is not far wrong in his conclusion that "considering that one sort of brain is always good for a five-figured salary, while another can never earn a living wage, the Binet-Simon scale gets down pretty close to the bottom of the whole economic and social problem."

LEADING ARTICLES.

THE INSURANCE ACT.

At the present moment the mind of the medical profession remains necessarily for the time being under the influence of that mental perturbation engendered of great issues—namely, a suspended judgment; nor is there much to be gathered from a careful study of sundry stray signs and portents. The medical members of the advisory Committee of the Insurance Commissioners have issued a statement to the profession which may be regarded as representing the cautious and conciliatory side of the case. From an analysis of the financial aspect of the question, they conclude that each medical man will receive £350 for every 1,000 insured persons, in addition to maternity benefit, and a portion of the sixpence set aside to meet extra cost in the matter of drugs. The members of the Committee emphasise their opinion that the doctors must very carefully decide, before refusing to work the Act, whether they are in a position to render the establishment of an efficient State service impossible. They regard the establishment of a uniform £2 income limit throughout the country as impossible, and suggest that the profession should consider how far the point has been met by reference under the Act to the Local Insurance Committees. The document concludes: "We ask you to consider whether, in view of the Government's offer, and in view of their pledge to reconsider the whole question in the light of the facts gathered together during the next three years, the profession would be wise to refuse to work the Act." Whatever may be said in favour of the views of the Advisory Committee, it is evident that they will not be in accord with those of a large number of medical men. From various parts of the country news comes of the rejection of the latest proposals of Mr. Lloyd George. For instance, at a meeting of the Chester and Crewe Division of the British Medical Association, to which all members of the profession were invited, and at which there was a representative attendance, the following resolution was passed unanimously: "That this meeting considers that the conditions of service laid down in the regulations issued by the Insurance Commissioners are intolerable to any self-respecting medical man, and would destroy for ever the independence of the medical profession.

We therefore decline to take service under the present regulations." The delegate to the Association was instructed to vote accordingly, and rejection is thereby firmly clinched so far as the Chester and Crewe Division are concerned. The Bristol Division of the Association has decided that it is impossible to advise the medical profession to work the Act on the terms outlined in the Chancellor's recent speech. Again, at a largely-attended meeting of members of the Guildford Division of the British Medical Association and others, held at Guildford, it was unanimously resolved that the recommendation of the Provisional Medical Committee that the medical practitioners in the area of the Guildford Division refuse to take service under the Insurance Act be adopted. Other reports to the same effect have come to hand, notably from Manchester, the City of London, and Lincoln, and within the next few days, when the majority of the local Divisions of the Association have registered their decision, it will be possible to forecast with tolerable accuracy the answer of the medical profession. The situation undoubtedly represents the most serious crisis that has ever occurred in the history of the medical profession in the United Kingdom. Amid the turmoil of dispute vital principles are at times apt to escape notice or, at any rate, to receive less than the amount of consideration to which they are entitled. On weighing the point of this complex dispute, one fact which emerges clearly is that much of the present trouble has arisen from the attempt to deprive medical men of control of what they have learned to regard as their own particular business. Matters they have hitherto managed for themselves are handed over to insurance committees composed mainly of laymen. Medical men, it is true, are permitted to settle disputes arising among themselves, but outside matters of difference must be submitted to bodies which have a lay majority varying from three-fifths to nine-tenths. The climax of lay interference is reached in the proposal to control the professional records and standard of work performed by medical men under the Act. It may be confidently assumed that unless the Chancellor of the Exchequer is prepared once and for all to give up any such proposal he may abandon all hopes of coming to terms with the medical profession. It may be as well to note that the important question of the relation of the medical charities to the Act has not yet been dealt with. Taking all things into consideration, it almost looks as if the latest proposals of the Chancellor of the Exchequer will fail to constitute anything more than a step nearer the long-sought goal of a sound basis of negotiation. Meanwhile we may ask Mr. Lloyd George to consider for a moment what sort of proposals he would be likely to lay before the lawyers were he suddenly to become convinced that sound and cheap law were no less than sound and cheap medicine an imperative necessity for the welfare of fifteen millions or so of his fellow countrymen. Possibly the parallel might conduce to a more practical tempering of expediency with the amenities of a cultured altruism.

CURRENT TOPICS.

Professor Nietner on Tuberculous Infection.

In his address at the recent opening of the new Medical School for Tuberculosis, now established at the City Road Hospital for Diseases of the Chest, Professor Nietner, of Berlin, put forth some observations which, coming from such an authority, claim the most serious attention. He urges that during the last ten years facts have been disclosed going far to establish the conclusion that in a very large majority of cases infection occurs during the first years of life. Hamburger and Schlossmann practically agree that 90 per cent. of all children up to the completed 12th year are infected; that tuberculosis is a true children's disease, is acquired during childhood, and must be prevented, treated, and healed during childhood. Professor Nietner affirms the fact that in by far the greater number of cases the source of infection can be traced to the human subject suffering from "open" tuberculosis, and that infection is acquired through the close intercourse resulting from family life within the home. Only those preventive measures can, therefore, hope for success which keep this fact constantly in mind. But to prevent the child from becoming infected in his home without weakening those family ties which are so essential to the moral health of the nation is a problem of the utmost complexity. Professor Nietner deprecated schemes for separating the child from his family, though every care should be taken to safeguard it in its own home. He denied that tuberculosis was a "school disease," and maintained that the school could not justly be held responsible for the spread of infection. He attached the utmost importance to the careful organisation of the school medical service, and said that to the school doctor alone was the power given to prevent latent tuberculosis developing into active disease in the children examined by him and kept under his supervision.

The Deptford School Clinic.

Some interesting reading is provided in the third report of the Deptford School Clinic or Health Centre (*a*), which has now established for itself a permanent footing for the more effective treatment of a large number of children in the district who suffer from want of air and from lack of food. Apart from what are generally known as "Council diseases," the clinic provides treatment for the usual medical and surgical diseases, including skin affections, in addition to minor injuries for which suitable first-aid treatment is dispensed. The founders of the clinic have, from the beginning, been most anxious to interest all parents in the enterprise, and their experience during the past year goes to show that parents are not quite so callous and unconcerned about the health of their children as is sometimes supposed. No less than 6,500 children have received benefit during the last school year, the greater number of cases falling under defects of vision, throat and ear affections and skin diseases. Ethyl chloride has been the anæsthetic of choice for all throat cases, with satisfactory results. The opinion is expressed that the neuroses form a much larger proportion of the cases than the figures would indicate. This is no doubt true, but, at the same time, many organic effections begin as, or are accompanied by, symptoms which are often put down as functional. The average cost per head is not quite three shillings and threepence. As an educational centre in health matters the clinic occupies a prominent position among modern sanitary reforms.

(*a*) P. S. King and Son, Westminster. Price 3d.

Heredity and Disease.

Among the most interesting speeches in the recent debate on the above subject at the Manchester Pathological Society was that contributed by Professor Hickson. He approached the question from the biological aspect as one ignorant of pathology. He considered that evidence on inheritance in man was often unsatisfactory. The reason seemed to be that man presents many difficulties for investigations. Man differed from all other animals in the extraordinary length of his period of juvenility. Civilised man reached physical maturity at about 15 years of age, mental maturity much later. Man appeared to require for his proper development a long period in which he might be influenced by his environment; he was much more a creature of environment than other animals. It thus became difficult to distinguish between innate and acquired characters. Another difficulty was that man was a very slow breeding animal. It was difficult to get a sufficiently large number of cases of transmission of a particular character. Few statistics included more than three of four generations, or 100 to 150 individuals; in peas or in mice biologists were not satisfied with less than several thousand individuals. There was a third difficulty, not peculiar to man, the possibility of transmission of characters by the placental blood. Such characters were, of course, not innate. This term could only be applied to characters transmitted through the germ cells. For these reasons he was always sceptical of statistics bearing on the transmission of acquired characters. He thought it very doubtful if a hard and fast line could be drawn between fluctuations and mutations. There were, undoubtedly, mutations which were transmitted without blending, but there were others in which there appeared to be only a difficulty of blending. In the case of an extra digit blending could only mean the production of an extra half-digit. Now, experiments on poultry had seemed to show that the transmission of an extra toe obeyed Mendelian laws, but on analysis of the figures it appeared that many of the extra toes were only half-toes, which could equally well be interpreted as blending.

Dust.

Nowadays our civilisation has finally got rid of many of the more ponderous evils that used to trouble the hapless race of men. We are still left with the small nuisances that help to make life unbearable. We are safe from being knocked on the head by a peevish neighbour, but to make up for this we are becoming more readily irritated by disturbing details. Noise and dust and such like that our grandfathers would have laughed at, or at the most have hastily objurgated, occupy the attention of our brightest minds. The knowledge that passeth all examinations is giving its utmost attention to nullifying the vexation wrought by the multiplication of small insinuating evils. Dust is well-nigh ubiquitous; competent statisticians have estimated that there are four thousand millions of dust particles in an average puff of cigarette smoke. Chemically pure water is a non-conductor of electricity. The addition of a grain of salt to a hundred tons of water allows the electric current to traverse it. Each molecule of water is linked to its neighbour by a bridge of salt. By such facts as these we realise what is meant by the divisibility of matter. When we realise this and think of all the noxious and nauseating substances of which the dust in our streets is made, we wonder with increasing horror why the chief method of getting rid of dust is to disturb it from its resting place and send it spinning through the air on its maleficent mission. Dust ceases to be dust when firmly attached to other bodies. A wet duster, tar and crude oils annihilate it. The popular appreciation of this fact would materially reduce the sick rate and the labours of the cleansing department.

A New Cure for Tuberculosis.

It is quite a little time since we were presented with an infallible specific for the cure of tuberculosis. The latest tilter against Koch's ubiquitous bacillus is Dr. Franz Friedmann, who last week announced the discovery of a cure for all forms of tuberculosis. This comprehensive claim, which is specially stated to include tubercle of the lungs and bones and lupus, was made at a meeting of the Berlin School of Medicine, and under such auspices merits at least our serious attention. 682 patients, including 250 "consumptives," have been treated, and Dr. Friedmann, looking no doubt with the eye of enthusiastic faith, sees "practically a hundred per cent. cures." His method is apparently akin to the treatment of rabies at the Pasteur Institute; as a preparation of living attenuated bacilli is injected intravenously. Over a thousand human subjects are said to have been inoculated with no untoward results. So far the only accounts of Dr. Friedmann's work obtainable are through the lay press, and we are consequently not in a position to deal fully with it. On the face of it, the idea certainly seems worth a trial, but the fiasco of Koch's old tuberculin has made us very sceptical as to the complete efficacy of any new "cure" for the havoc wrought by acid-fast bacilli. A hundred per cent. cures, even when diluted by the blessed word "practically," is too good to be true. For all that, if Dr. Friedmann is demonstrably able to help or relieve even a small proportion of tuberculous cases he will be honoured in his generation.

Depopulation of France.

This question has in late years occupied, from time to time, much of our space in editorial and correspondence columns, and it is only a few weeks ago that it was once more discussed in an editorial suggested by information supplied by our Paris correspondent with regard to a proposed enquiry by the French Government. Our correspondent's news was correct, and it is now announced that a Parliamentary Commission has been appointed. The Government is anxious mainly on the ground of national defence. The French population has for years virtually ceased to increase, whilst the German has been growing at a rate representing the addition of at least an extra army corps annually. When other things are equal victory rests with the big battalions, and France seems now to recognise that without allies she would not be able to hold her own in a fight to a finish with her hereditary foe. The Commission is to examine partially into the social problems involved—infantile mortality, hygiene, intemperance, and tuberculosis, together with questions of assistance to mothers, and of proper education of the sexes. It does not appear that the Commission is to trouble itself with the questions of most interest from the biological point of view, namely, the effect of the extreme limitation of the family upon parents and offspring, and the effects upon the quality of the race which the carrying out of a system of artificial selection on a gigantic scale must surely produce. The broad result of the marriage customs of France is practically to secure a mate for every girl provided with an adequate fortune, however unfit for maternity she is, and to bar the way to marriage for every other candidate, however rich her physical and mental endowments may be.

Is Insanity Increasing?

Few medical readers, and, least of all, readers of the Medical Press and Circular can need the suggestion of caution in accepting the statements with regard to the increase of lunacy, so commonly nowadays put forth, sometimes even by men placed, if only by themselves, in the class of specialists in mental disorders. Whenever a cautious and scientific examination of statistics is carried out the evidence goes towards negation of a pessimistic conclusion. This is the effect of the annual report by Dr. J. Carswell, on the certification of lunatics in Glasgow. It includes a review and statistical analysis of the production of insanity during the past twelve years. Dr. Carswell summarises as follows his conclusions:—There has been no increase of insanity among either males or females at the developmental period of life—that is, at age 15-30; there has been no increase among males of any age, but there has been an apparent increase among females at age 25-50. Dr. Carswell believes that the probable explanation of this increase is that public attention having been directed to the better care of mentally defective persons an increased number of females of this class have been sent to asylums. Judged by the "occurrence" test, Dr. Carswell concludes that insanity does not appear to be showing any real increase in Glasgow. Glasgow may be taken as a type of the great cities where all the conditions of life conducive to mental stress exist to the full, and it is not unreasonable to argue from this that similar conclusions would be derived from really scientific examination of the statistics of all our great urban populations.

PERSONAL.

Dr. C. S. Brebner, of Widnes, has been appointed Medical Officer of Health for Chiswick.

Dr. Mabyn Read has been appointed Whole-Time Medical Officer of Health to the City of Worcester.

Dr. T. P. Cowen, M.D.Lond., has been appointed Medical Superintendent of the Rainhill Asylum, Lancashire.

Dr. J. Lorrain Smith, M.D.Edin., has been appointed Joint Pathologist to the Longmore Hospital for Incurables.

Mr. T. B. Layton, M.S., F.R.C.S., has been appointed Surgeon to the Throat and Ear Department at Guy's Hospital.

Capt. K. S. Thakur, I.M.S., has been selected for appointment as Specialist in Radiography and Electrical Science.

Dr. Frank E. Keane, M.D., has been appointed Honorary Physician to Out-Patients at St. Vincent's Hospital, Melbourne.

Dr. J. I. Jaffe, of Stoke Newington, has been returned unopposed as a member of the Stoke Newington Borough Council.

Dr. R. Salter, of Bermondsey, has been chosen as one of the Labour candidates for the district at the forthcoming election for the London County Council.

Dr. David Connor Kirkhope, M.D.Glas., D.P.H. Cantab., of Leyton, has been appointed Medical Officer of Health and School Medical Officer for Tottenham.

Dr. C. Addison, M.P., has been presented with an illuminated address by the hawkers of the City of London as an acknowledgment of his services on their behalf.

Dr. J. Dickinson Leigh, M.D.Edin., F.R.C.S. Edin., D.P.H., has been appointed Whole-Time Medical Officer of Health and School Medical Officer for the Borough of Hartlepool.

Dr. Henry Dyer delivered an interesting lecture the other day before the Glasgow Health Culture Society on "Health and Citizenship: The Duties of School Boards and other Public Bodies."

Dr. H. J. Macevoy will preside at the annual dinner of the Harveian Society of London, to be held at the Hotel Great Central, Marylebone Road, N.W., on Thursday, November 14th, at 7 for 7.30.

Mr. R. D. O'Leary, Medical Superintendent of the "Dreadnought" Hospital, Greenwich, was entertained last week at Frascati's by the staff and his colleagues upon the occasion of his departure for the Balkans under the auspices of the Red Cross Society.

Dr. R. Dudfield, M.A., will read a paper on "Still-Births in relation to Infantile Mortality," at the meeting of the Royal Statistical Society, to be held on Tuesday, November 19th, at 5 p.m., at the rooms of the Royal Society of Arts, John Street, Adelphi, W.C.

Dr. Thomas J. Kelly, of Enniscarthy, has repudiated the statement which appeared in the *Standard* of the 5th instant, of alleged negotiations between him and various Members of Parliament concerning the extension of medical benefits to Ireland. He has had no negotiations with any of the gentlemen named.

Professor E. H. Starling, F.R.S., has been appointed Chairman of the Committee on Colour-Vision and Colour-Blindness of the British Association, the members of which consist of Professors F. Gotch, Leonard Hill, A. W. Porter, and A. D. Waller, with Dr. F. W. Edridge-Green as Secretary.

The Hon. Sir John A. Cockburn, K.C.M.G., M.D., will preside at a Joint Conference of the Child Study Society of London and the Montessori System of the United Kingdom on the Montessori System of Education, to be held at the Royal Sanitary Institute, 90 Buckingham Palace Road, S.W., on Saturday, November 16th, at 3 p.m.

The Carmichael Prize for the best Essay on the State of the Medical Profession in Great Britain and Ireland, has been awarded to Mr. H. Nelson Hardy, F.R.C.S.Edin., of Croydon. The writer deals fully with National Insurance, and points out defects in the Irish Dispensary and Workhouse system in Ireland, as well as the one-portal system and other matters of professional interest.

The following members of the medical profession have been elected or re-elected Mayors of their respective county boroughs: Dr. S. R. Alexander (Faversham); Dr. W. S. Gibb (Hartlepool); Dr. W. B. Maurice (Marlborough); Dr. J. P. Atkinson (Saffron Walden); Dr. E. Cureton (Shrewsbury); Dr. G. W. Joseph (Warrington); Surg.-Major E. L. McSheehy (Wimbledon); and Dr. J. Rafter (Bootle).

Mr. Clinton Thomas Dent, F.R.C.S., of Brook Street, W., Chief Surgeon to the Metropolitan Police, formerly Hunterian Professor at the Royal College of Surgeons, a former President of the Alpine Club, who died on August 26th, aged 61, left estate of the gross value of £117,661, of which the net personalty has been sworn at £116,263. He bequeathed £1,500 to the Belgrave Hospital for Children, whom failing to St. George's Hospital, and his medical and surgical works to the Students' Library of St. George's Hospital.

A CLINICAL LECTURE
ON
THE EARLY SYMPTOMS OF TUBERCULOUS MENINGITIS.

By Professor HUTINEL, M.D.,

Of the Faculty of Medicine of Paris; Physician to the Hopital des Enfants Malades.

[Specially Reported for this Journal.]

The symptoms that usher in an attack of tuberculous meningitis are far from conforming in every instance to the classical descriptions—indeed, the disease often assumes aspects well calculated to deceive and mislead the unwary.

When we get meningeal symptoms in a patient who is known to be suffering from bacillosis, that euphemism for tuberculosis, who, for example, displays well-marked pulmonary, pleural, peritoneal, osseous or intestinal lesions or mediastinal glandular lesions, there is not much danger of our failing to suspect the nature of the morbid process and to formulate an appropriate diagnosis. When, on the contrary, meningitis attacks a person apparently in good health it may tax our diagnostic resources to the utmost.

This is why attempts have been made to distinguish between primary and secondary meningitis. Assuredly it is quite possible for tuberculous meningitis to supervene independently of any pre-existing focus elsewhere, but you must recognise at once that this is quite exceptional. As a matter of fact, tuberculous meningitis is almost always secondary to a latent or known focus of infection. Six or seven times out of ten we find anterior lesions in some other organ or apparatus, and the more carefully we investigate the pathological antecedents of the subjects the more shall we be convinced that primary tuberculous meningitis is of exceedingly rare occurrence. For this reason it is well for us to familiarise ourselves with the prodromata and the initial symptoms other than those which are given in the text-books.

When we are called to a child whose health has hitherto been reputed good, it behoves us to examine into his antecedents as well as those of his parents. Has the father had coxalgia or the mother pleurisy? Has the little patient had enlarged glands or joint troubles? Information of this kind will prove of great service in guiding our enquiry.

We must also investigate recent or distant disturbances of nutrition—*i.e.*, arrest of growth, loss of weight or marked pallor; is there excessive growth of hair at the nape of the neck or in the interscapular region? Then, too, unusual length of silky eyelashes and softness of the flesh are signs not devoid of importance.

If there be wasting with cachexia we may suspect a specific heredity, especially if the child be well fed. If, however, Wassermann's reaction prove negative we must at once suspect the possibility of meningeal tuberculosis at its onset and watch the patient accordingly.

We must not omit to examine the lymphatic glands of the neck, groins and axilla. If we find micro-polyadenitis this would indicate a latent toxi-infection, not improbably of tuberculous origin. Lastly, in the absence of any tracheo-bronchial adenitis we must examine the mediastinum for evidence of the presence of germs ready to invade the economy and attack the meninges.

The child suffers more or less from loss of appetite and has a little fever in the evening, with sudden jumps, indicative of some latent infection. An unequal, unstable, irregular pulse should put us on our guard and direct our attention to the lungs and mediastinum, where bacillary lesions are apt to present themselves.

Interrogation may reveal to us a change in the temper of the little patient who, from good tempered, has become peevish and irritable. We may find, too, that his mental faculties and power of attention have been failing, another sign of incipient invasion of the meninges. Then, too, from time to time the parents may have remarked attacks of headache in their child, coinciding with feverishness. These are the principal prodromata, the discovery of which imposes upon us a certain prudence in the matter of prognosis although they are not, of course, pathognomonic.

And now let us discuss the value of the three great symptoms: headache, vomiting and constipation, which make up what has been termed the "meningitic tripod." At the onset of tuberculous meningitis these are often wanting, while, on the other hand, they are common in connection with other diseases.

In children between three and fifteen years of age, headache is a frequent symptom, but it may be conspicuous by its absence. I remember a case in which, having performed lumbar puncture, I withdrew a liquid rich in lymphocytes and albumen, the presence whereof enabled me to diagnose commencing tuberculous meningitis, yet in this instance there was no headache and typhoid fever was suspected.

In somewhat older children headache is a more constant symptom, but it is frequently absent in infants between six months and two years of age. The same remark applies to spontaneous easy vomiting which is common in the older children, rare in the very young. As for constipation, it may be altogether lacking, or is replaced by diarrhœa.

It is plain, therefore, that these ordinary symptoms of tuberculous meningitis are neither constant nor pathognomonic.

Retraction of the belly, the well-known concave abdomen which is stated to come on early in meningitis may, in some instances, be due to acetonæmic vomiting, which is also accompanied by headache.

In tuberculosis of the meninges dyspeptic disturbances are, as a rule, fairly well marked, the tongue, however, is never dry though furred. It is rare for the fever to rise as high as 104° F.; as a rule it remains somewhere in the neighbourhood of 102°-103° or less. The pulse may be 110-120, and we may note irregularities and intermittences. As to the breathing, we often get either acceleration or slowing. We may find that the diaphragm is contracting while the extrinsic muscles of respiration remain idle, or *vice versa*.

The tuberculous subject at the onset of an attack of meningitis is often depressed and even disagreeable with the persons about him. He insists on being "let alone" and complains of a tired feeling. He lies on one side, curled up, covering his eyes with the bedclothes in consequence of more or less marked photophobia. He has hallucinations which may be accompanied by a sort of quiet delirium, it is only later that we get the characteristic meningitic scream. Nevertheless, all these symptoms are vague, and present nothing absolutely typical of meningitis; but, as a rule, they "precede and usher in inequality of the pupils, strabismus, palpebral ptosis, stiffness of the neck, and the other unquestionable symptoms indicative of meningeal irritation." The symptomatic tripod may be replaced by attacks of convulsions. For instance, a suckling babe, seven or eight months old, is seized with fits which cannot be accounted for. The fontanelles are bulging, the neck is drawn back, the limbs are rigid, and the belly retracted. The reflexes are dissociated.

As you know, however, fits are not peculiar to infants, they may supervene in older children, but in that case there is a tumour, "a cerebral tuberculoma," which has given rise to secondary meningitis. That was the view expressed by Archambauld, de Rillet and Barthez, which has been erected into a dogma, but which is not without exceptions.

We may meet with slight stiffness of the neck quite at the onset of the disease, long before there is either pain, headache, or Kernig's sign. I remember the case of a little girl in my wards who had been admitted for supposed entero-colitis, in whom, instead of enteritis, we discovered a murmur at the root of the left bronchus indicative of mediastinal adenopathy. One day I happened to caress her in passing, and I noticed that her neck was somewhat retracted. Lumbar puncture was resorted to, when we found that the cerebro-spinal fluid was markedly albuminous and rich in lymphocytes. She died a few days later of tuberculous meningitis, although there had only been constipation, and a temperature of between 102° and 103° F. Here again, however, we must not jump to the conclusion that a moderate rise of temperature and stiffness of the neck necessarily point to meningitis. These symptoms, as a matter of fact, are met with in connection with cervical Pott's disease. They are also present in presence of retro-pharyngeal abscess and cervical glandular abscess. The hypothesis of meningitis consequently can only be seriously entertained after we have excluded all local lesions capable of giving rise to stiffness of the neck. As to Kernig's sign, if it be associated with lymphocytosis of the cerebro-spinal fluid, and changes in the pulse and breathing, then it is really possessed of significance.

When a little patient is brought to us with fever, and he strikes us as rather apathetic, if he suddenly develops facial asymmetry, ptosis, strabismus, inequality of the pupils and hemiplegia, we must entertain the possibility of its being a case of encephalitis, of which these symptoms often herald the onset. We must then look for Babinski's sign, dissociation of the reflexes, and we must not forget to have the cerebro-spinal fluid examined to ascertain whether it is albuminous, and contains an excess of lymphocytes. In very young children, long before we get certain signs of meningitis attention may be attracted to their listlessness, to the fixity of the eyes, to the absence of winking, the bilateral dilatation of the pupils, and especially by a tendency to drowsiness. On enquiry you find that they have been losing weight, the fontanelles are a little tense, the neck a little stiff, and the reflexes dissociated. In such cases we must lose no time in performing lumbar puncture in order to see what the cerebro-spinal fluid looks like. Lastly, there may be some increase of size of the cranium simulating acute hydrocephalus as the prelude of meningitis.

You see, then, that the diagnosis of incipient tuberculous meningitis is sometimes rather difficult, especially in very young infants. We are apt to think of typhoid fever until the stiffness of the neck, the squint, the inequality of the pupils, etc., contradict that diagnosis. We must also be on our guard against mistaking it for a relapse of typhoid fever when three or four months after an attack the subjects develop a high temperature with an irregular pulse, 110 or 120, and retraction of the abdomen. Examination of the cerebro-spinal fluid shows albumen and lymphocytosis, and enables us to recognise the onset of a meningitis which will ere long carry off the patent. In all probability the original attack of supposed typhoid was merely a first outburst of tuberculosis.

Entero-colitis must also be excluded. This is how matters stand: A child who has been subject to attacks of entero-colitis is seized with constipation, headache and fever. He is assumed to be suffering from another attack of entero-colitis, and no anxiety is felt, but a fortnight later the little patient succumbs to meningitic troubles.

Not long since I saw a child who, for the fourth or fifth time, presented signs of appendicitis with constipation, abdominal pain, vomiting and fever. The physician called in a surgeon who, struck by the curious aspect of the little patient, examined him closely, and discovered strabismus and inequality of the pupils. I was then called in, and confirmed the existence of Kernig's sign, stiffness of the neck and marked inequality of the pupils. This turned out to be a case of tuberculous meningitis.

A little girl, suffering from slight cervical adenitis, complained of disturbances of vision. An oculist was called in and diagnosed tuberculosis of the choroid. Soon after she died of tuberculous meningitis.

I need not insist upon the mistakes that are made at the onset of tuberculous meningitis, and I only hope that this long enumeration of the difficulties that arise in this connection will impress upon you the importance of lumbar puncture directly you have the slightest supicion of the nature of the troubles.

In these cases the cerebro-spinal fluid may be under pressure, already a sign of some value. As a rule, the fluid is clear, presenting at the bottom of the test-tube a cloud formed apparently of threads of cotton. In rare cases it is coloured, tinted with blood due to minute hæmorrhages in the brain. It is of higher specific gravity, and it contains coagulable albumen twice or three times the normal amount.

Cytological investigation shows pronounced lymphocytosis, and polynuclear cells may be present; but if we puncture several times these disappear, the lymphocytes remaining. This polynucleosis may possibly be due to some concomitant secondary infection; but in the centrifugal clot we may find tubercle bacilli. Guinea-pigs inoculated therewith die in the course of a few weeks.

In doubtful cases lumbar puncture will settle the question; nevertheless, you are not entitled to insist upon it, seeing that it is in no sense curative, and is often objected to by the family.

I may add, in conclusion, that in tuberculous meningitis we sometimes get remissions which you must be careful not to mistake for recovery. In 1874, when I was house-physician, I saw a little girl nine years of age who was hemiplegic and meningitic. She recovered from her cerebral affection only to die twenty-five years later of tuberculous meningitis. Long remissions are, therefore, possible, but are extremely rare.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Edward C. Hort, F.R.C.P.Ed. Subject: "The Causes and Treatment of Fevers."*

ORIGINAL PAPERS.

A NOTE ON INJURIES AT OR NEAR THE ANKLE. (*a*)

PART II.

BY J. JACKSON CLARKE, M.B.LOND., F.R.C.S.

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RADIOGRAPHY more than any other agency has developed knowledge of the varied forms of injury that affect the posterior part of the tarsus, and the close investigation of the effects of injuries demanded by the Workmen's Compensation Act has shown the great importance of early and complete diagnosis of such injuries. It is therefore important to know all the different injuries and the commoner combinations of them.

The different groups of injuries will be numbered as in the list given in the first part of this article published in the issue of this Journal of the 6th of November. In *Clinical Examination* Destot recommends that a tracing of the inner border of the foot, the ankle being at a right angle, be made. The breadth of the inner border of the foot is increased in both astragalo-scaphoid and in mediotarsal lesions.

Radiographic Examination.—In examining skiagrams the astragalo-calcaneal shadow must first be examined; in astragalo-scaphoid lesions the head of the astragalus is depressed; in transverse tarsal displacements the internal column, the scaphoid with cuneiform bones, are thrown upon the dorsum of the foot. Both lesions give rise to apparent flat-foot, as do fractures of the os calcis—*e.g.*, by sinking of the astragalus into the thalamus, or by elevation of the tuberosity.

If astragalo-scaphoid cases are left to themselves the resulting flat-foot is painful.

In both cases there is deformation in the long axis of the foot; when the feet are brought together the heels and the heads of the first metatarsal bones cannot be approximated at the same time.

In interpreting skiagrams in cases of injury, or alleged injury of the posterior tarsus, the changes produced by common static flat-foot and the deformities produced by *arthritis deformans* and *tabes dorsalis* must be borne in mind. The mechanical conditions represented in Figs. 1 and 2 and the modifications which hold good in different positions of the foot must also be borne in mind.

Fig. 3 is the tracing of an extreme case of spontaneous flat-foot, and it would do equally well for a sub-astragalar dislocation of the foot outwards; or another way of expressing the same fact: incomplete dislocation of the astragalus inwards. This instance alone shows the great care required in diagnosis in cases of alleged injury. We may now pass to consider the remaining groups of injuries.

Group 6.—*Fractures and Dislocations of the Astragalus.*—Taking an astragalus in the hand one notes the groove of the trochlea corresponding to a smooth elevation of the tibia and on the under aspect the depression for the attachment of the interosseous ligament one infers that a longitudinal splitting would be a common fracture. Such a fracture (*b*) I described as follows:—A right astragalus. A fracture which passes in a plane oblique from before backwards and outwards, has separated the inner part from the rest of the bone; the inner fragment is sub-divided into four subequal portions. From a man who fell about six feet from a scaffolding. The greater part of the bone could be seen and felt beneath the skin in front of the ankle. Astragalectomy was performed. The outer fragment was found to be separated from all its attachments, and rotated, so that its upper surface was directed inwards.

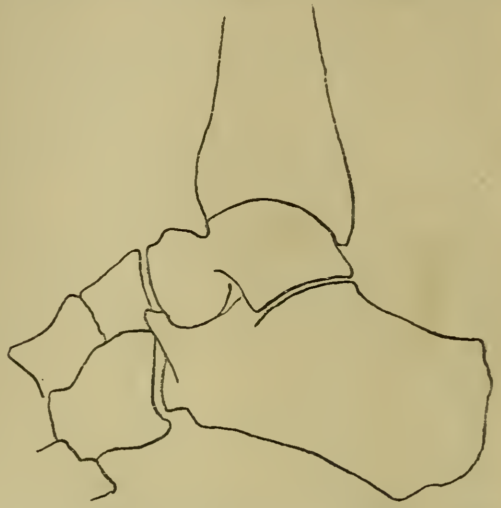

FIG. 1.—The outline of the bones traced from a skiagram of a normal foot is shown.

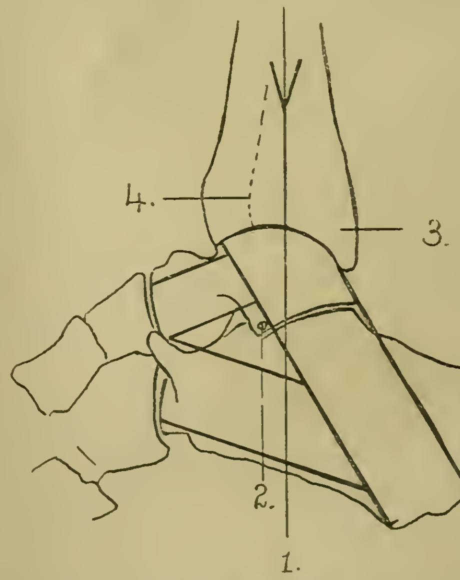

FIG. 2.—Is the same figure with the addition of a vertical line, 1, to represent the chief line of transmission of force from the tibia to the highest point of the astragalus when the foot is at right angles with the leg. The small circle shows the centre of rotation at the ankle and it lies on the external process of the astragalus in front of the chief line of force. The thick ruled lines represent the inclination of the body of the astragalus to its neck, and the direction of the bony trabeculæ from the posterior astragalo-calcaneal articulation to the heel and the inclination of the greater process to this. The posterior process of the tibia is shown at 3 and the mechanical anterior border of the tibia is indicated at 4.

(*a*) The Figs. in this article are tracings from skiagrams, and, with the exception of Figs. 3 and 7, are after Destot.

(*b*) "Catalogue of St. Mary's Hospital Museum." 1897.

Separation of minute fragments of the astragalus is observed in cases of sprain and in dislocations. Such small fractures are not so rare as they were formerly thought to be. They tend to delay recovery, and may cause permanent stiffness. Surgically fractures of the astragalus are more important than fractures of the os calcis, because they afford more scope for treatment.

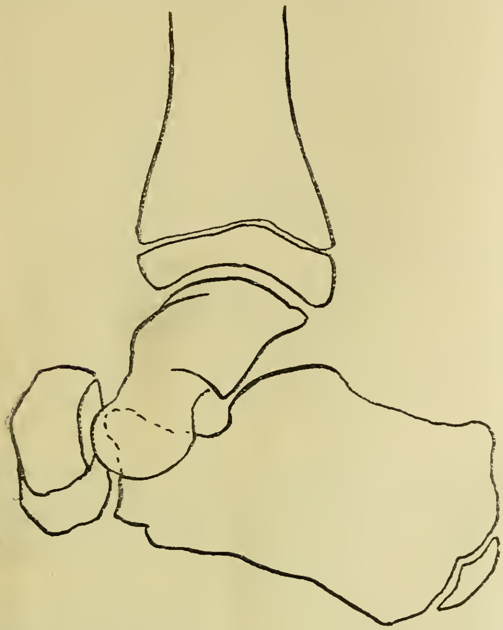

Fig. 3.—Tracing from the skiagram of an extreme degree of spontaneous flat-foot.

It is not always easy to distinguish either clinically or by radiography between a fracture of the body and one of the neck of the astragalus. The body of the bone includes the tibial and the postero-external calcaneal surfaces, and joins the neck in an oblique plane. In lateral skiagrams the shadow of the internal malleolus falls in front of the anterior border of the body of the astragalus and is apt to be mistaken for it.

Fractures of the astragalus may be associated

(*a*) With fracture of the inferior tibial surface;
(*b*) With fracture of the calcaneum;
(*c*) With fracture of the scaphoid.

Isolated fractures are sub-divided into:

(*a*) Fractures of the body, *e.g.*, Fig. 4.
(*b*) Fractures of the neck, *e.g.*, Fig. 5.
(*c*) Fractures of the head.

Injuries to the head of the bone are best considered with fractures of the scaphoid. All classes include cases with and cases without displacement, the latter having become known since Röntgen's discovery.

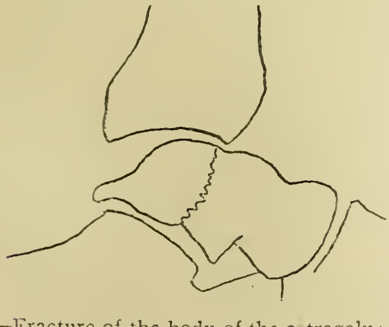

Fig. 4.—Fracture of the body of the astragalus without displacement.

Class (*a*).—Fracture of the body of the astragalus is a serious injury, demanding removal of the whole of the bone. Partial resections are useless. In the impacted variety the body of the astragalus is converted into a pulp, and the part is fixed in the position it occupied at the moment the damage was done.

Class (*c*).—A fragment of the head of the bone can sometimes be felt displaced under the skin of the dorsum of the foot. In cases where there has been no direct injury to guide the surgeon, the diagnosis is often made only when, owing to the subsequent development of a painful flat-foot, an X-ray is taken.

Class (*b*).—The neck of the astragalus has the function of transmitting the weight of the body in the digitigrade position of the foot. Fissures extending to the body of the bone may complicate fracture of the neck as mentioned above.

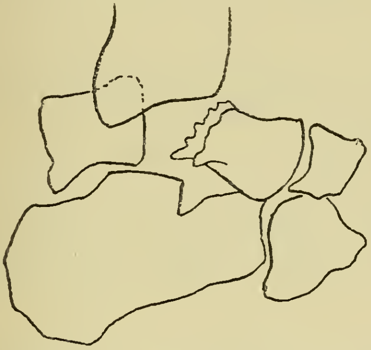

Fig. 5.—Fracture of the neck of the astragalus, the hinder fragment being displaced backwards.

Complete dislocations of the astragalus apart from fractures are rare, but this bone has been known to be completely separated from the body, being shot through an aperture in the skin by the dislocating force. The astragalus, writes Destot, is a badly nourished bone, and when there is a double displacement it is best to resect it.

Astragalectomy for dislocation of the astragalus was practised in the year 1818 by Dupuytren, who relates the case of a coach-builder who, on leaping backwards from a ladder, sustained a forward dislocation of the astragalus:—Excruciating pain, a large, hard, irreducible prominence beneath the skin, in front of the tibia and fibula, and extending to the instep, much extravasation of blood and a "frightful amount of swelling, which increased every moment and seemed to threaten speedy gangrene."

An incision was made through the skin parallel to the axis of the foot, and the head and neck of the astragalus were immediately brought into view. They were seized, but in vain; for the posterior part of the bone was grasped and held fast between the tibia and os calcis. It was found that the astragalus was inverted and the hook-like process at its posterior extremity was firmly fixed beneath the tibia. "I now fastened a piece of strong twine round the neck of the displaced bone, and, by forcibly elevating it, was enabled to disengage it from its locked position and remove it entire with the exception of a small fragment, which was subsequently discharged. I saw M. G. three years after this occurrence, when he walked with some slight degree of lameness, but otherwise as quickly and for as long a distance as before the accident"—and this happy issue occurred in spite of suppuration and constitutional disturbance usual after open operations at that time.

Group 7.—*Fractures of the Os Calcis.*—Class (*a*): Fracture by avulsion of the posterior extremity by traction of the tendo Achillis; this fracture, Fig. 6, is very rare, and requires open operation.

Class (*b*): Fractures by the weight of the body falling on the feet. It is to be observed that although the os calcis comes almost in contact with the ground, the common fractures it sustains are indirect.

1.—Fractures of the middle portion—the body (*a*) of the bone, or *thalamus*. This fracture is an impaction of the posterior astragalo-calcaneal articular surface in varying degrees (see Fig. 7). This is the commonest fracture, according to Destot.

2.—Fracture between the body and anterior extremity, or the greater process.

3.—Fracture of the tuberosity.

4.—Fracture of the sustentaculum tali is rare and usually accompanied by fracture of the external malleolus. An erroneous diagnosis of bimalleolar fracture may be made, and surprise is felt that a patient with such a common injury does not get well. A tender, bony mass forms below the internal malleolus. The X-ray shows a dark line crossing the anterior end of the bone and the lower part of the head of the astragalus—the latter is tilted downwards.

The following points in diagnosis and treatment may be noted.

Fracture of the greater tuberosity of the os calcis may be (*a*) partial by avulsion of the part to which the tendon of Achilles is attached (Boyer's fracture, Fig. 6); or (*b*) total. Thickening of the heel, followed by rapid swelling and ecchymosis, ensue. When the swelling has subsided, the sub-malleolar depressions are found to be normal, or only a little fuller than usual. The foot-print is thickened along its outer part, but the arch is not flattened as much as in fracture of the thalamus; the fore part of the os calcis is intact. This variety is important owing to the fact that the prognosis is favourable, because the surfaces on which the astragalus rests are intact.

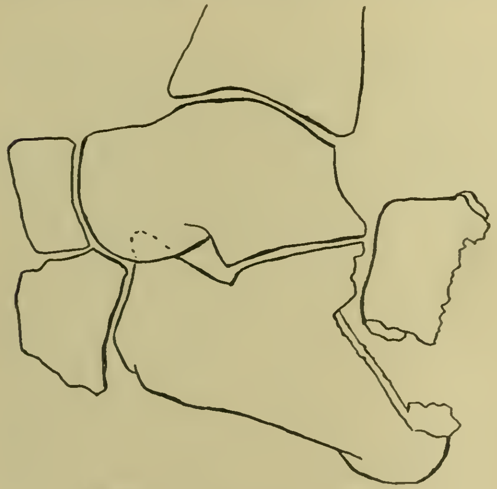

Fig. 6.—Avulsion of the hinder extremity of the os calcis—Boyer's fracture.

The treatment of fractures of the calcaneum, save for fixation of the fragment in Boyer's fracture by open operation is nil, but X-ray diagnosis is important because the prognosis is very different in different cases, though clinically cases may closely resemble one another.

Group 8.—*Sub-astragalar sprain and sub-astragalar dislocation.*—Sub-astragalar sprain.—In order to produce this sprain, the astragalus must "tack, roll and pitch" in its calcaneo-scaphoid bed, and the triple movement is accompanied by rupture of ligamentous fibres, except the interosseous ligament, which remains intact as a rule. Sub-astragalar sprain is the result of a temporary dislocation. The symptoms are (*a*) swelling localised to the sub-astragalar region, and (*b*) ecchymosis. It is sometimes mistaken for fracture of the external malleolus, or avulsion of its tip.

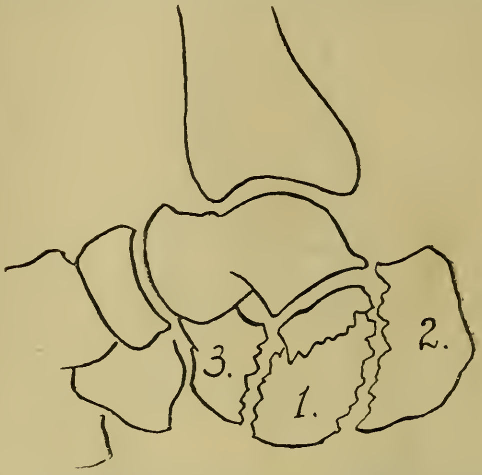

Fig. 7.—Diagram showing fracture of the thalamus of the third degree with total fracture of the tuberosity and of the greater process. The peculiar kind of flat-foot differing from the ordinary kind (Fig. 3), and also the diminished distance from ankle to the under surface, is to be noted.

X-rays may show particles of bone separated from the head of the astragalus or from the scaphoid; prognosis must then be guarded. Diastasis of the inferior tibio-fibular joint may be present without displacement. This sprain is a common one, and may be looked upon as an incomplete sub-astragalar dislocation which has been reduced spontaneously.

Sub-astragalar dislocations are usually characterised by being produced without much violence, slipping from carriages, bicycles, etc. They cause relatively little pain, and are easily reduced. The necessary anatomical condition for a sub-astragalar dislocation of the foot is rupture of the interosseous ligament. Three forms of the displacement occur:—

Form i. The head of the astragalus is displaced upwards and inwards. This form may be caused by a relatively slight injury, such as a false step. The condition which precedes the rupture of the ligament, according to Destot, appears to be a forced plantar flexion at the transverse tarsal joint, opening the bed of the astragalus, the head of which rests between the anterior border of the tibia and the upper border of the scaphoid, thus causing more or less equinus with an increase of depth of the foot below the malleoli. The head of the astragalus is easily felt beneath the skin, which is so much stretched that it tends to ulcerate. This condition recalls that seen after fracture of the astragalus with displacement of the fragments, but in the sub-astragalar displacement the foot is abnormally rigid instead of being abnormally flexible; the force causing the displacement, and the resulting pain are both less in cases of sub-astragalar dislocation than in those of fracture. Reduction under anæsthesia is easily

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(*a*) The *body or thalamus* of the os calcis is not described in some standard works on anatomy: an omission that is felt in considering fractures of this bone.

effected by drawing the fore part of the foot forwards, whilst downward pressure is made on the head of the astragalus.

Form ii. Incomplete displacement inwards.—In these cases the foot is completely everted and the astragalus forms a marked projection below the internal malleolus. Destot found reduction easy in most recent cases, but in one case reduction was found to be impossible owing, as was found in operating, to the tendon of the tibialis posticus being caught between the displaced head of the astragalus and the scaphoid, and there was a further complication present in the shape of a fracture of the external apophysis. Astragalectomy was done, though on reflection Destot concludes that tenotomy of the tibialis posticus might have made reduction possible. Fracture of the external malleolus may also complicate this fracture.

Form iii. Incomplete displacement outwards.—In slighter cases the signs in skiagrams taken laterally may be slight, but they are well shown in antero-posterior skiagrams, and the clinical signs are also clear: the foot being fixed in inversion. The tarsal sinus is occupied by the displaced astragalus. The malleoli are farther from the plantar surface than is normal, and the external malleolus may be fractured. The inter-osseous ligament may be intact in slighter cases. *There is no pain.* In the most pronounced cases the foot is completely inverted, and the external malleolus so prominent as nearly to pierce the skin. The inner surface of the astragalus rests against the outer surface of the os calcis.

In Traumatic Flat-foot the head of the astragalus tilts into the sole of the foot, pushing itself out under the tuberosity of the scaphoid; sometimes fracture of the scaphoid, or its own head. Thus a traumatic flat-foot may be regarded as a slight sub-astragalar dislocation.

Group 9.—*Astragalo-scaphoid fractures* and *fractures and dislocations of the scaphoid.*—The former are caused by subluxation of the astragalus downwards and forwards. This subluxation may occur either primarily or secondarily: primarily in falls on the feet in the digitigrade position, the head of the astragalus being forced against the scaphoid, the astraglus being pushed downwards and forwards by the weight of the body. Secondarily, after fracture of the head of the astragalus the front of the neck of the astragalus is pushed forwards by the weight of the body.

Fractures of the Head of the Astragalus may be classified as follows:—

1.—Partial fractures, fragments being separated by the traction of ligaments.

2.—Separation of the head in one piece.

3.—Comminution of the head.

These lesions are often mistaken for sprains, but the swelling tends to last longer and fragments may be felt under the skin, or crepitus may be found, and it is only when patient begins to put the foot to the ground that the painful flat-foot is observed, and it tends to get worse instead of better with time.

Fractures of the scaphoid are not common, usually the lower border is broken off. There may be thickening of the inner border of the foot; increased prominence of the head of astragalus; also slight flat-foot.

Differential diagnosis: *A Skiagram* differentiates this injury from

1.—Old malleolar fracture.

2.—Cured flat-foot of adolescence.

3.—Charcot's disease, in which there is disagregation of the whole mid-tarsus.

4.—Mid-tarsal dislocation.

Treatment.—Loose fragments should be removed if present. In most cases the parts accommodate themselves to the new conditions.

Double dislocation of the scaphoid has been observed.

HEDONAL AS AN ANÆSTHETIC. (*a*)

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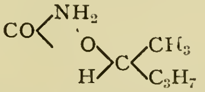
When experimentation is being vigorously pursued in any branch of practical science it may be assumed that the investigators are not content with what is known and practised. In recent years several new drugs and new methods of application have been used for the production of analgesia and anæsthesia, and, although they have met with varying success, no one will deny that their introduction is due to a healthy and honest dissatisfaction with the routine use of chloroform and ether by inhalation.

In 1910 Federoff, of St. Petersburg, first employed hedonal as an intravenous anæsthetic. Its success on the Continent led to its adoption in England last Easter, since when it has been used extensively in London and Leeds.

Encouraged by the report of Mr. Page last May in *The Lancet*, and by what I saw in Leeds this summer, I have used this anæsthetic in 30 cases during the last four weeks, and obtained full surgical anæsthesia in all.

Before, however, going into details regarding them, the characteristics of hedonal may be considered. Hedonal, or methyl-propyl-carbinol urethane is an organic compound, the molecule of which contains a urethane nucleus joined to a methane group, as the structural formula shows:—



It follows that in the hedonal molecule there is only one atom of nitrogen, or 14 grammes of nitrogen in 119 grammes of hedonal. As, however, the maximum dose of hedonal is 15 grammes intravenously, the extra work thrown on the excretory organs is the elimination of 1.76 grammes of N_2. If this is excreted as urea, as is stated, a full dose of hedonal is equivalent to only 3.75 grammes of urea. The carbon and hydrogen are oxidised to CO_2 and H_2O. This explains the tolerance shown by nephritic cases towards the drug. Four estimations of the urea excreted were made in my series, but the results, owing to the small amount involved, were entirely conclusive. As a one per cent. solution of hedonal is saturated at 100°F. it is used at a strength of 0.75 per cent. in normal saline. The solution of the drug is effected by using saline at about 140°F. and the preparation finished by filtering and boiling the fluid. Although, owing to its volatility, a little hedonal is lost in boiling, none is decomposed. When cool the hedonal crystallises out in fine needles.

The *technique* of administration is simply that of continuous venous infusion, bearing in mind that the flow must be carefully regulated. The apparatus I have used is that made by Thackray, of Leeds, and consists of a container, with thermometer and level gauge, a dropper, to indicate the rate of flow, and a fine cannula. The container is filled with solution at 110°F., and the cannula is introduced under local anæsthesia into a suitable vein, usually the cephalic. If the operation is on the upper part of

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(*a*) A paper read before the Section of Surgery, Royal Academy of Medicine in Ireland, Oct 25, 1912.

the body the internal saphenous vein in front of the internal malleolus is most convenient. In ten of my cases it was chosen. In one instance no adequate vein was found. This patient was an emaciated girl, fourteen years of age, and as the operation was amputation of the leg it was considered advisable after failing to get a vein in the arm to resort to ether.

During induction the fluid is run in at a rate of 50 to 150 cc. a minute. While less is needed, the more rapid the flow, I have found it advisable in the case of feeble patients to slow the infusion to 40 or even 20 cc. a minute, to avoid marked depression of the respiratory centre. In two or three minutes the patient becomes drowsy and yawns with subjective sensations of warmth and well-being. This drowsiness merges rapidly into deep sleep, the conjunctival reflex goes, and a little later the corneal reflex is lost. A minute later the induction operation may be started. Usually the induction is unaccompanied by any struggling whatever, only one of my patients proving troublesome. This patient was sent up from the country for emergency operation of amputation of a crushed hand. He arrived at hospital prepared for operation as in the pre-anæsthetic days.

As has been mentioned, the danger during induction is marked respiratory depression, which causes cyanosis. This is immediately checked by slowing the infusion. Normally, the breathing becomes quiet, so that special pains should be taken to keep the tongue forward.

In two of these cases slight cyanosis, due to an overdose of anæsthetic, developed, but was immediately relieved by diminishing the drug. A little oxygen was also given as it was ready, but I do not think it was necessary. Both of these patients were carcinomatous, one being a woman of 50 and the other a man of 78.

The time of induction has varied from six to fifteen minutes, and the amount of solution from 250 cc. to 1,250 cc. The latter dose was necessary in a strongly-built man of 30, though given at a rate of 130 cc. per minute, while the former was sufficient for a man of 78, though given at a rate of only 20 cc. per minute. Once the skin incision is made the flow is cut down so as to keep up anæsthesia with as little fluid as possible. The patient is well asleep when the corneal reflex is gone; the pupil is one to two mm. in size and reacts to light. On relaxing the anæsthesia, the pupil enlarges and the corneal reflex returns. The oxygenation of the face and ears should always be good.

On beginning the infusion the pulse rate increases to about 120 per minute and then falls in a few minutes to about 80. The subsequent regularity of the pulse is remarkable, and is due, I think, to the constant infusion. For example, at the commencement of an amputation of the breast for cancer in a woman of 45 the pulse was 80, while on leaving the table 65 minutes later it was 72. In only four cases was the pulse rate more than 100 after operation, and in all these the hæmorrhage had been exceptionally severe.

A few minutes before the end of the operation the anæsthetic is stopped, and, as a rule, the corneal reflex has returned before removal of the patient from the theatre. The period of sleep afterwards varied from half-an-hour to, in one case, 18 hours. In about 24 cases the patient spoke within two hours and soon fell asleep again to wake occasionally throughout the night. That is to say, in no case suitable for the anæsthetic was there anything like prolonged unconsciousness. Drowsiness, however, persists for 24 hours.

For five patients of the series morphia was required; of these three had undergone bone operations. Only three patients vomited after operation, one of whom had stones removed from the common bile-duct while the other two were suffering from intestinal obstruction. Finally one patient had slight headache for 24 hours but did not volunteer the information herself.

Retention of urine occurred after hernia operations, as with ether anæsthesia, but was never prolonged. In no case was there suppression of urine, glycosuria, or albuminuria.

On leaving a catheter in the bladder during operation it was found that in the third stage of anæsthesia no urine was secreted, a phenomenon which also occurs during the administration of ether and chloroform.

The blood pressure records of this series are, unfortunately, very incomplete, but, so far as they go, bear out Mr. Page's results. A fall in pressure of about 20 mm. of mercury occurs at first, after which the pressure remains constant.

The total amount of the drug given must vary greatly according to the age and condition of the patient and the nature of the operation. An arbitrary maximum is 2,000 cc., or about 66 oz. but it is only under exceptional circumstances that so much should be given. My fourth case received 2,020 cc., but, as the operation was the removal of a large epithelioma of the scalp and grafting of the exposed area, this great amount of fluid had no deleterious effect whatever. In fact, it no more than compensated for the hæmorrhage. On the other hand, the introduction of a large quantity of fluid into the circulation of a patient who does not need it, is a dangerous procedure and is responsible for most of the complications which have recently been classified by Dr. Veale, of Leeds, under the headings—cutaneous, pulmonary, and venous, complications. Under the first head are mentioned—patches of œdema in the gluteal region, blisters on the heels, and bedsores. None of these have occurred in my series, but they should be guarded against by giving instructions to the nurse in charge to change the position of the patient while asleep. With regard to pulmonary trouble, it must be stated that this anæsthetic is distinctly contra-indicated in the case of young robust people, who are undergoing operations of moderate severity unaccompanied by serious loss of blood. Such patients invariably require up to, and over, 1,200 cc. for a operation lasting half-an-hour, and are therefore peculiarly liable to develop œdema of the lungs. On the 10th of this month I anæsthetised J. F., a boy of 17, for the cure of an inguinal hernia. The anæsthetic was taken well, but had to be infused rapidly. In all 1,250 cc. were used. On return to bed at 12 noon his corneal reflex was very sluggish, and he was still unconscious. An hour later he was not completely anæsthetic. Towards five o'clock his breathing quickened, his temperature rose, and he became slightly cyanotic. I saw him at six, when the respirations were 40, the pulse 144, and the temperature 101.4° F. His face was flushed and wet with perspiration. The corneal reflex was gone, but he still moved slightly when stimulated. A catheter was passed and 20 oz. of urine withdrawn. He was propped up in bed, the tongue was drawn forward and some frothy mucus removed from the mouth. One bag of oxygen was administered, and in fifteen minutes his breathing had slowed to 30 and his pulse to 108, while the corneal reflex had returned, and he moved briskly when stimulated. During the night he remained in the same condition, and mucus was sucked out of the larynx at 1 a.m. Towards morning he steadily improved and awoke at 6 a.m., eighteen hours after the operation. He made an uneventful recovery. In such cases the indication is to open a vein and withdraw about 10 oz. of blood, if the symptoms do not improve on clearing the air passages.

Bronchitis is the second lung complication that may occur. In this series two patients developed a cough that lasted about 24 hours. As one of them had only 550 cc. infused, it was probably in this case due to a chill rather than the anæsthetic. In a third case, a woman of 35, suffering from gall stones, a small patch of broncho-pneumonia developed in the right apex. She recovered from this, however, in a few days. As she was in feeble health, and only required 750 cc. of solution, I do not think it is likely that the anæsthetic was at fault. Nevertheless, pneumonia is a definite, though very infrequent complication, and has been responsible for three reported deaths.

Of the occurrence of infarct from a dislodged thrombus I have no experience. It could hardly happen unless the vein were infected, and only one case is reported in which it probably occurred. Thrombosis of the femoral vein has not been found in any of my cases, and in the five cases reported by Dr. Veale it has not been proved that the method of anæsthesia used was responsible. We have had no case of cerebral thrombosis, and one alone has been reported.

In concluding a discussion of the possible complications of this anæsthetic it is desirable to mention the more severe operations performed with its assistance.

The series includes, excision of the lower jaw for cancer, excision of epithelioma of the scalp, excision of carcinomatous glands in the neck, amputation of the breast for cancer, gastro-enterostomy for advanced pyloric cancer, two colostomies for rectal cancer, laparotomy for obstruction, two appendicectomies, cholecystotomy, choledochotomy, two amputations, cerebellar decompression and cranioplasty. The ages of the patients vary from 17 to 78 years and the duration of anæsthesia from 10 minutes to 1 hour 53 minutes.

Already some of the disadvantages of this method have been mentioned. First is the occasional difficulty in finding a suitable vein. In the case of one patient the cannula was introduced into a vein so small that the infusion was delayed, and consequently anæsthesia was not obtained until twenty minutes had elapsed. Secondly, the absolute necessity for asepsis renders the method unsuitable outside the hospital theatre; while, thirdly, it is unnecessarily complicated for short operations. On the other hand, in operations on the head and neck the surgeon is not hampered by the anæsthetist in the least degree, oozing from the skull and dura mater is remarkably slight, and in abdominal operations muscular rigidity is entirely absent. Neither of these points has, I think, been sufficiently emphasised. With any other anæsthetic the greatest danger in brain work is hæmorrhage; in abdominal work the operation is often delayed, and correct *technique* rendered impossible through rigidity of the muscles. With hedonal both of these undesirable factors are practically eliminated. Moreover, in cases of hæmorrhage and collapse the constant infusion of saline is useful, while if more saline be needed the tube can be removed from the container and a further infusion of ordinary saline given. This was done in two of these cases with distinct benefit.

From the occurrence of œdema in a youthful patient, which I have described, and from exactly similar accounts mentioned in the journals, it may be fairly argued that the anæsthetic is contra-indicated in the young and vigorous, who are to undergo slight operations. On account of the possibility of such a complication, I would endeavour in all such patients, if the anæsthetic were desirable for other reasons, to lessen the amount of infusion necessary by administering, two hours before operation, two to four grammes of hedonal by the mouth, as recommended by Mr. Page.

With regard to the contra-indications, it is impossible to speak authoritatively, except to mention that, as the laryngeal reflex is abolished very early and completely, a tracheotomy must be performed and the pharynx plugged before an operation on the mouth, nose, or neighbouring air sinuses is attempted. This precaution was observed in the removal of the lower jaw and part of the tongue, mentioned already, and the results were excellent. Slight cyanosis occurred on introduction of the tube, but was due to blood clot in the tube and was immediately relieved on removal of the clot.

In cases of uncompensated heart disease, the infused liquid might throw a dangerous strain on the right ventricle, but I have no definite information on this question. On the other hand, nephritic patients prove good subjects, and so far no cases of suppression are recorded. This is due to the distinct diuretic effect of the saline infused. In six severe cases the average amount of urine passed in the twenty-four hours after operation was 900 cc. Also, as has been shown, the amount of nitrogen to be excreted is extremely small, so that the absence of kidney complication which obtains is only what might be expected. In this series no death occurred which can be attributed to the anæsthetic. Three patients died while in hospital, the first of whom was suffering from left-sided hemiplegia. She was almost comatose before operation, being only able to move the right arm and leg feebly when stimulated. In the whole course of the operation, which lasted one hour and three-quarters, only 300 cc. were injected, and on leaving the table the patient was no more comatose than before. Death occurred eighteen hours later, and it was found on examination that she was suffering from vegetations on the aortic valves, long-standing infarcts in the kidneys, spleen and liver, and finally a relatively large aneurysm in the right internal capsule, which caused the hemiplegia.

The second death occurred in a boy of 18 years, who came to hospital with a history of three weeks of severe vomiting and partial obstruction. He was operated on at once, and laparotomy confirmed the diagnosis of pelvic sarcoma. His recovery from the anæsthetic took place within an hour, but he died the following evening. The *post-mortem* examination showed a huge sarcoma infiltrating the pelvic wall and pressing severely on the rectum.

The third patient was a man of 71, who came to hospital suffering from prostatic retention. He had been tapped six times suprapubically during the previous week, and was in a very feeble condition. The urine was very foul. A suprapubic cystotomy was done to drain the bladder and the prostate was removed. The operation lasted six minutes, and the amount of hedonal used was 500 cc., but he died two days later. *Post mortem* the only cause of death found was pelvic peritonitis, a condition, it may be assumed, due to infection when the bladder was being tapped.

In conclusion, my thanks are due to those surgeons who allowed me to anæsthetise their patients, and, more especially, to Sir Thomas Myles, whose cases constitute the majority of this series.

Gift to a Manchester Hospital.

Mr. Edward Graham Wood, of Manchester and Salford, has presented a cheque for £1,000 to endow a bed at St. Mary's Hospital for Women and Children, Manchester. Mr. Wood has helped to raise £50,000 for the same hospital, and this is the fourth bed he has endowed in the district.

THE ARTIFICIAL PRODUCTION OF PNEUMOTHORAX IN PHTHISIS BY INJECTION OF NITROGEN (a)

By HUBERT CHITTY, M.B., M.S., F.R.C.S.

I FEEL somewhat diffident in writing on a subject of which my own experience is very slight. Thanks to the courtesy of Dr. Campbell-Faill, (b) I am at the present moment treating several patients in conjunction with him, but we commenced our treatment so recently that it would be unfair to draw any conclusions from them as to what the end results may be. The subject has, however, been much before the medical profession of late, and I hope it may serve a useful purpose to summarise the results which others have obtained by this method of treatment.

During the past hundred years it seems to have occurred to a good number of observers that the course of pulmonary tuberculosis might be favourably influenced by mechanical means. Spasmodic attempts have been made to limit the movements of the lungs by strapping the chest, or by compressing it by weights. Of recent years, too, operations have been performed upon the bony chest wall in order to favour the collapse of tuberculous cavities. Other operations have been undertaken with the idea of draining these cavities, or of removing the whole or part of a tuberculous lung. The results of these last procedures have generally proved fatal.

Forlanini noticed that quite a number of cases are on record in which the arrest of pulmonary tuberculosis has coincided with the development of a pleural effusion, and this observation led him (in 1882) to suggest that the induction of an artificial pneumothorax might exercise a beneficial effect on the course of this disease. He himself has reported many cases successfully treated in this way, and the method is being extensively carried out on the Continent and in America. In all upwards of four hundred cases have been recorded.

Several observers have practised this operation in Great Britain, but it is only since Dr. Lillingston ably summarised the treatment and its results, in an article in the *Lancet* (1911, ii., 145) last year, that any general interest has been taken in it by the medical profession of this country.

Let us consider the rationale of the proceeding. We know how important a part rest plays in the cure of tuberculosis in other parts of the body. Now it is obvious that if a satisfactory pneumothorax can be produced, the lung on that side will be absolutely immobilised. In addition to this, however, any tuberculous cavities will be encouraged to collapse, and their contents will be expressed. Every doctor knows how essential is free drainage to the cure of an abscess in other parts of the body, and it is only reasonable to suppose that the same principle holds good in the case of the lung. A tuberculous cavity cannot be expected to close all the while it is held open by its attachment to the rigid chest wall, and is distended by purulent material which cannot drain away.

Now, what one sees when a pneumothorax is induced is as follows:—During the first few hours the amount of expectoration is greatly increased as the lung empties itself of its retained secretions, and the temperature may rise at this period. Afterwards the temperature falls to normal, the cough diminishes, and the patient soon experiences a distinct feeling of improvement.

One knows how exercise, excitement, or an exacerbation of the cough will send up a tuberculous patient's temperature, or produce marked fluctuations in the opsonic index. Presumably this is by causing the absorption of large doses of bacterial products from the diseased lung. By the induction of a pneumothorax we put the lung at rest and diminish the amount of blood circulating through it, and, as a natural consequence, we find a steadying of both temperature and opsonic index. This must be of great importance if we wish to treat the patient successfully by tuberculin injections. The pulse follows the temperature. In one of our cases it fell from 120 on the morning of the first injection of gas to 80 two days later.

Before describing the operation I will enumerate the principal dangers. You will thus be able to appreciate how all, or almost all, of these may be obviated by careful attention to details of *technique*. Briefly, then, the chief dangers are:—

(1) Pleural reflex, *i.e.* shock, or even sudden death due to tampering with the pleura. Though this disaster is fortunately extremely rare, yet it may occur, just as it may when one taps a chest for pleurisy, or washes out an empyema cavity.

(2) Gas embolism, from the injection of gas into a vein, instead of into the pleural cavity.

(3) Asphyxia.

(4) Infection, with the production of a pyopneumothorax.

Of the minor complications, faintness during the gas injection, or shortly afterwards, is not uncommon. Dyspnœa is the rule when a positive intrathoracic pressure has been established. Slight temporary dysphagia has been recorded. Pleural effusion occurs during the course of treatment in 30 per cent. of all cases. One need rarely interfere, but may aspirate and replace by gas if it is causing any unpleasant subjective sensations. Surgical emphysema when it occurs subsides without treatment. It may be prevented by strapping a pad over the site of the puncture.

The apparatus consists essentially of:—

(1) A bottle containing nitrogen.

(2) A hand bellows connected with

(3) A second bottle filled with water. This water can be forced by the bellows into the first bottle, displacing an equal volume of nitrogen. Both bottles are graduated.

(4) A delivery tube which leads from the nitrogen bottle and is connected by a Y piece with a water or mercury manometer. The gas may be passed through a warming coil if desired.

(5) A needle, of which there are several forms. The commonest pattern in use is that designed by Saugmann.

Operation.

A preliminary injection of morphia or hyoscine lessens the tendency to pleural reflex and shock. I need scarcely mention that the patient's skin, the needle and the operator's hands must be carefully sterilised, as faulty asepsis may lead to a fatal result. The needle is pushed into an intercostal space till it is felt to penetrate the pleura. The point selected will be as far as possible from the chief seat of the diseases, and more than one puncture may have to be made before a spot is found free from adhesions. In quite a large percentage of cases no such spot has been discovered, and consequently failure to produce a pneumothorax at all has resulted. It is well to anæsthetise the skin before the initial puncture is made. Brauer dissects down to the pleura by open operation, so as to make certain that the point of the needle is actually introduced between its two layers. He is thus enabled to use considerable force to break down adhesions, and he records remarkably few failures. The needle is connected with a manometer, and when one thinks the needle point is in the pleural cavity the manometer is read. If good oscillations are shown (Lillingston mentions —14cm. of water on inspiration, to —6cm. during expiration as an average reading) there can be no doubt that the needle has in fact entered the pleural cavity. Small negative oscillations round about —4cm. of water indicate that the lung has been punctured. If the reading is not satisfactory one of three things has happened: (1) the needle is not between the two pleural layers, (2) these layers are adherent, or (3) the needle is blocked. Under these circumstances it is inadvisable to proceed, for the needle may have punctured a vein, and then there will be the danger of causing gas embolism. To minimise this risk I use an ordinary trocar and cannula for the first puncture. Then, removing the trocar, I introduce an inner cannula which has a solid end and a lateral opening, and which projects a short distance beyond the end of the outer cannula. It is practically impossible for this to get blocked, or for it to enter a vein, and this procedure combines the safety of Brauer's method with the simplicity of Saugmann's. Once a pneumothorax has been produced I employ a Saugmann's needle to maintain the condition. Being certain that the needle is in position, proceed slowly to pump in gas. Nitrogen is generally used, for it is not absorbed so quickly as is air. As the gas is introduced a careful watch must be kept on the patient, and if he manifests any unfavourable symptoms a stop should at once be made. At the end of the first injection the pressure is as a rule still negative, but where there are many adhesions the injection of even a few hundred c.c. of gas may cause the pressure to become positive. The initial pressure should not be raised above 4cm. of water, and except in the case of a partial pneumothorax, in which it is desired to break down adhesions, at no time should it be raised above 10cm. of water. Probably not more than a half to one litre should be injected at the first sitting, though on subsequent occasions the amount may be increased if this does not seem to be causing distress. The effects of large injections and high pressures may be alarming. Pain may be caused by the tearing down of adhesions; dyspnœa from the mediastinum being pushed over, thus hampering the action of the opposite lung; asphyxia caused by the secretions of the diseased lung being emptied into the trachea, and aspirated into the sound lung. After the initial injection the process may be repeated at intervals of a day or so, till physical signs and X-ray examinations demonstrate complete collapse of the lung. In order to accomplish this a positive pressure of 5 to 10 cm. of water should be produced. Once this has been obtained the condition may be maintained by an injection about once in three weeks.

(a) Read at a meeting of the Bristol Medico-Chirugical Society held on May 8th, 1912.

(b) Of the Bristol Dispensary for the Prevention of Tuberculosis.

Let us now consider what are suitable and what unsuitable cases. In cases where there is active and advanced disease on both sides it would obviously be useless and indeed harmful to throw all the work upon one lung. Attempts have been made, it is true, to compress the two lungs alternately, but, at any rate for the present, we may regard advanced bilateral disease as the chief contradiction. Extensive disease in other organs, especially intestinal tuberculosis, would also be a bar to operation. Of the remaining cases we may consider as specially suitable:—

(1) Those in whom the disease is advanced on one side, whilst the opposite lung is *unaffected*, *slightly* affected, or quiescent.

(2) Those in whom the temperature remains high in spite of the usual methods of treatment, and who show signs of autoinoculation whenever they take any exercise. I may here instance one of our own cases, whose evening temperature for at least a year had been from 99 to 100 degrees, in spite of his having spent a long time at a sanatorium, and of the fact that at home he had been living in a shelter. His temperature came down to normal within forty-eight hours, and has remained at that level ever since. Numerous similar instances have been recorded. (*a*)

(3) Cases which are going downhill in spite of the usual methods of treatment.

(4) Early unilateral cases for whom sanatorium treatment is not available. Especially does this apply to the bread-winner of the family.

(5) Cases of severe recurrent hæmoptysis.

One is often in doubt as to which side is giving rise to the bleeding, but in these cases it would be quite justifiable to compress the worse lung, and, if this had no effect, then to aspirate the gas and repeat the operation on the other side.

(6) Although most of the recorded cases have been patients suffering from chronic tuberculosis, yet this has not been by any means invariably so, and some cases of acute phthisis have been successfully dealt with.

Laryngeal tuberculosis does not appear to be a bar to the operation. In fact, several recoveries from this form of disease have been recorded. This is easy to understand, as the cessation of cough, and of the constant passage of tuberculous sputum over the larynx must be beneficial.

The question naturally arises, "What is the duration of the treatment?" No very definite answer can yet be given. There is little doubt that in advanced cases it must be prolonged for eighteen months to two years; but in very early cases cure has been reported when the gas has been allowed to absorb completely after a few months only. If the treatment has not been sufficiently prolonged recrudescence has been the rule. Under these circumstances it has been found impossible to reproduce the pneumothorax owing to the formation of dense adhesions between the two pleural layers. Therefore when it has been decided to allow the lung to re-expand a careful watch should be kept on the patient. A rise of temperature or any increase in the amount of expectoration would suggest the advisability of keeping the lung at rest for a few months longer. It is wonderful how readily the healthy portions of the lung will expand and fill the thoracic cavity, even after the treatment has lasted from two or three years. As the pleural layers come into contact there may be considerable pain and a friction rub become audible.

In discussing the results of treatment we must bear in mind that all, or almost all, the reported cases have been of one type—viz., patients suffering from very advanced disease, in whom other methods had proved incapable of arresting the morbid process, and in whom the mortality would most likely have been at least 90 per cent. Many cases have been too recently published for us to be able to judge what their ultimate fate may be, but undoubtedly the initial results have been full of promise. The way in which temperature falls and cough ceases is marvellous. Certainly well over one hundred cases have, however, been recorded in whom the treatment was commenced many years ago, and in these there would seem to have been a permanent arrest of the disease in at least 60 per cent. In many of the more recent cases immense improvement has already ensued, and patients who a few months back seemed almost moribund now

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(*a*) This patient has now, six months later, resumed light work.

appear to be on the high road to recovery. Where deaths have been recorded during the course of the treatment they have been due, as a rule, to disease in the other lung, to tuberculous disease in some other part of the body, or to some intercurrent malady. In the few cases in which *post-mortem* examinations have been made, healing by fibrosis has generally been recorded, though this has not always been evident.

One theoretical objection has been raised to the treatment—viz., that when a *spontaneous* pneumothorax occurs in a late case of phthisis a fatal result is frequent. I hope that I have shown this to be quite a specious argument in that the two conditions are in no way comparable. In a spontaneous case there is no regulation of the pressure, and no stopping when symptoms of shock arise. Moreover, the pleural cavity is in direct communication with the lung, and is very liable to become infected from this diseased organ.

I believe that this method of treatment has a future before it, even though it be for only a limited number from out the vast array of the tuberculous. There is plenty of room for experiment and observation, and I trust that many will give this treatment a trial upon certain selected cases. Risk there may be, but who counts risk when life and death are in the balance?

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Perforated Gastric Ulcer.—Mr. Willmott Evans operated on a woman, æt. 27, suffering from perforated gastric ulcer. The patient had had indigestion for many years, which was worse at times. The chief symptom was internal pain after meals, which was relieved by vomiting and also by lying on her face. She had had her first attack at eight o'clock, and she was at work at half-past eleven; she immediately felt an acute and severe pain in the left side of the abdomen. She felt unable to move, and as she did not improve after the administration of some brandy and water, the pain rather growing worse, she was brought to the hospital in a cab. On examination the patient was seen to be collapsed, her legs were slightly drawn up, the pulse was feeble and frequent, and the abdominal muscles were very tense. On percussion of the abdomen there was dulness in the left flank, and on the left side the muscles were evidently more tense than on the right. A diagnosis was made of perforated gastric ulcer, and it was resolved to operate immediately.

The operation was performed two hours after the onset of pain. The abdomen, having been painted with tincture of iodine, was opened in the middle line above the umbilicus by an incision about four inches long. Some free fluid immediately escaped after the peritoneum had been incised, and it had a strong odour of brandy. The stomach was gently drawn up into the wound, and it was then seen that on the anterior surface near the lesser curvature, and about midway between the cardia and the pylorus, there was a small opening which would about admit a crow-quill. From it was coming a little whitish fluid. The margins of this opening were found to be thickened. By means of Lembert's stitches the opening was closed, and the mucous membrane of the stomach brought together for about a quarter of an inch on each side. Some of the free fluid was then mopped up with sponges on holders. A further opening was next made immediately above the pubes, and through it some fluid was removed from the pelvis. A drainage tube was placed in this opening, and the original incision closed except for a second drainage tube at its upper part, Gauze dressings were applied, and the patient sent back to bed.

Mr. Evans remarked that the diagnosis of this case was fairly easy, for there was a long history of severe dyspepsia, the pain of which was relieved by vomiting and by the prone position. These all pointed definitely to a gastric ulcer, even though the patient had never had an hæmatemesis. The sudden onset of the symptoms and the severity of the pain, the collapse, the small, frequent pulse, and the rigidity of the abdomen all pointed strongly to a perforated gastric ulcer. In this case, he said, there was no loss of liver dulness. He considered it was not at all rare to find the liver dulness, even though there may be some free gas in the peritoneal cavity. It was sometimes difficult to find the orifice of the perforation, especially when it was on the posterior surface and near the cardiac opening. In this case, however, it was quite easy, and it was also easy to close the perforation by means of Lembert's sutures. In this case there was not much extravasation, because more than three hours had elapsed since the last meal, and therefore extensive drainage was not necessary. The extravasated fluid consisted of little more than brandy and water. Sometimes, Mr. Evans said, it was necessary to make more provision for drainage. The prognosis, he remarked, was good, because there had been such a short interval (only two hours) between the perforation and the operation. Time, he thought, was the most important factor in the prognosis. Gravity carries the fluid into the pelvis, therefore it was generally advisable, he considered, to drain the pelvis, but neither drainage tube should be left in more than twenty-four hours, the peritoneum being quite capable of dealing with what is left behind.

When the case was dressed next day the patient was perfectly comfortable; much of the rigidity of the abdomen had gone and she had not vomited. The pulse was only 96 and of good volume. The drainage tubes were left out and a stitch put in place of each. She took liquid food well, and in a fornight was allowed to get up, and then she was permitted to take some soft solid food. Three weeks after operation she went to a convalescent home, whence she returned in a month perfectly well. Before leaving the hospital her teeth were seen to, several carious stumps being removed.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Clinical Section.

Meeting held Friday, November 8th, 1912.

The President, Sir William Osler, Bart., in the Chair.

EXHIBITION OF CLINICAL CASES.

Dr. M. A. Cassidy showed a case of rheumatoid arthritis treated by Hoefftcke's splint. The patient, a dressmaker, æt. 26 was admitted to St. Thomas's Hospital in May, 1909, three years after the onset of rheumatoid arthritis. She had been bedridden and unable to stand for more than a year; both legs were acutely flexed on the thighs; the left knee-joint was fixed, and the right allowed only a few degrees of movement. The left shoulder-joint was firmly ankylosed, and the hands presented the appearances characteristic of advanced rheumatoid arthritis. Radiant heat, massage, passive movements and extensions produced very little improvement, though persevered with for four months. On September 21st, 1909, both knees were moved under an anæsthetic and put up in plaster. On September 30th the splint was fitted. On December 3rd she was able to walk with the help of sticks, and on January 1st, 1910, she could walk without assistance. When shown she could run, and her walking gait would not attract attention.

Mr. Wilfred Trotter showed a case of advanced carcinoma of epiglottis, with involvement of glands, treated by operation without laryngectomy; operation in November, 1910; no recurrence. A man, æt. 49. He was admitted to University College Hospital on November 3rd, 1910. Difficulty in breathing and swallowing had been present for nine months. There was well-marked stridor. The epiglottis was greatly enlarged by an obviously malignant growth. The upper opening of the larynx was completely obscured by the tumour, which also caused considerable obstruction of the pharynx. The growth was more extensive on the right side than on the left. In the right anterior triangle a glandular mass 1½ to 2 in. in diameter was present. It was very hard and fairly well defined, but was obviously fixed to the carotid sheath.

An operation on the glands was done on November 5th, 1910. Right side of neck dissected. Internal jugular vein and sterno-mastoid muscle removed with contents of triangles. One gland was adherent to the vein. During the operation laryngeal obstruction supervened and a tracheotomy was done.

The primary growth was operated upon on November 21st, 1910: exposure of tumour by longitudinal "transthyroid" pharyngotomy. Local excision, including epiglottis, part of the tongue and the anterior and lateral walls of larynx as far down as the vocal cords. The tongue and remains of the larynx were drawn together by strong mattress sutures, the gap left by removal of the tumour being completely closed. The longitudinal wound in the pharynx was then closed. Healing was fairly rapid, and there was very little leakage from the pharynx.

In March, 1912, a few glands were removed from the left side of the neck. No evidence of disease was found in them. The patient had thus been free of recurrence for two years. The case was shown as an instance of the curability of advanced carcinoma of the upper opening of the larynx and to show that cure can be effected without laryngectomy.

Dr. W. **Essex Wynter** showed a case of acholuric jaundice. The patient was a female, æt. 22. Her mother had had no other children. The girl had been jaundiced from birth, the intensity varying, but being always more decided at the menstrual periods. During exacerbations the linen became stained and the urine very dark brown. Sometimes there was itching of the skin, and she often complained of dragging pain in the left hypochondrium, but had no vomiting. The motions were fully coloured and the urine contained urobilinogen but no bilirubin. The spleen was much enlarged and hard. Wassermann's reaction was negative. Bilirubin was present in blood serum. Blood count: Red cells, 2,710,000; white cells, 13,000; hæmoglobin, 52 per cent.; hæmoglobin index, 0.86; nucleated red cells, 78 per cubic millimetre.

Differential white cell count: Lymphocytes, 35.4 per cent.; hyaline and transitional, 3.6 per cent.; polymorphonuclears, 59.2 per cent; eosinophiles, 1.8 per cent.; mast cells, 0. The fragility of red cells was represented by laking in saline solution, 0.55 per cent. as against 0.45 per cent. control.

Mr. **Lawrie McGavin** showed a case of resection of cæcum, appendix, ileo-cæcal valve, and 10 inches of ileum from chronic appendicitis. The patient was a woman, æt. 52. Four years ago she was admitted for pain in the region of the appendix, with occasional vomiting of five weeks' duration. There was no definite history of recurrent attacks. She looked sallow and ill; temperature 99.5° F. In the right iliac fossa a firm, prominent mass was felt, lobulated on the surface and dull to percussion. The mass was increasing in size, and there was a leucocytosis of 10,000. On opening the abdomen, the lower portion of the ileum, with the cæcum and appendix, were found to be involved in a dense mass of fibro-plastic material surrounded by many adhesions. The whole mass was isolated and resected, and a lateral anastomosis performed by direct suture. She subsequently developed a fæcal fistula, but this ultimately closed, and since she had been in good health.

Also a case of resection of cæcum, ileo-cæcal valve, appendix, and 10 inches of ileum for obstruction following an entero-anastomosis; subsequent ventral hernia cured by filigree implantation. The patient was a woman, æt. 49. She was admitted in 1908 for the cure of an umbilical hernia. Eighteen months previously she had been treated for a femoral hernia which was recurrent and strangulated, an enterectomy being performed.

While waiting for operation she developed signs of obstruction. At the operation a mass of bowel was found adherent to the middle line above the pubes, the bladder and the iliac fossa. On separation, it was found to consist of the cæcum, appendix, and nine or ten inches of ileum and some omentum. At the point of attachment of the ileum to the abdominal wall there was a perforation communicating with a fæcal abscess, the lumen of the gut being here reduced to the diameter of a lead pencil, the stenosis having occurred at the site of the old anastomosis. The whole mass was excised and a lateral anastomosis was performed. The abscess cavity being drained, a ventral hernia subsequently appeared and became rapidly larger. Eight months later this was cured by the implantation of a 6-in. filigree, since when the patient had been in good health.

Also a case of resection of cæcum, ileo-cæcal valve, appendix, and 5 inches of ileum for sarcoma; anastomosis by Murphy's button; button retained for four years. The patient was a man, æt. 24. In 1908 he was taken suddenly ill with pain in the region of the appendix, set up by lifting a heavy girder. This lasted three weeks, when he commenced to vomit, and was admitted to the Seamen's Hospital. His bowels acted normally and he had no pyrexia. He stated that he had had a similar attack six months previously.

On admission he looked very ill, but his pulse, like his temperature, was normal. In the right iliac fossa was a mass large enough to produce an obvious bulging of the abdominal wall; it was firm, fixed, lobulated and devoid of tenderness. There was neither hyperæsthesia nor rigidity, and the respiratory movements were good. Nothing was felt per rectum, there were no other lumps in the abdomen, and the hepatic dulness was normal.

Under spinal analgesia the abdomen was opened, and the mass was found to involve the organs above mentioned; no glands were felt in the mesentery or portal fissure; the whole mass was therefore resected with the corresponding iliac fascia and mesentery, and a lateral anastomosis performed. Under the threatening condition of the patient, this was rapidly accomplished by means of a Murphy's button. He recovered well, but had not passed the button, which had remained for over four years in the blind end of the ascending colon without causing the patient the least inconvenience. For this reason he refused to have it removed.

Microscopically the mass was a myxo-sarcoma apparently arising in the cæcum at or about the base of the appendix. There was much inflammatory infiltration about the latter, which was, however, irrespective of the tumour.

Also a case of gastro-enterostomy for hæmatemesis, followed by ileus and fæcal vomiting; cæcostomy; subsequent ventral hernia; cure by implantation of 6-inch filigree. The patient was a man, æt. 44. In 1909 he suffered from gastric ulcer, and was admitted to the Seamen's Hospital with severe hæmatemesis, for which gastro-enterostomy was performed. The hæmorrhage ceased, but 48 hours later vomiting, becoming rapidly fæcal, set in. The abdomen was reopened, and nothing was found except a general condition of paralytic ileus. The cæcum was therefore opened and the ileum intubated. The vomiting ceased and the patient made a good recovery. Later the cæcum was replaced, but a ventral hernia soon developed at this point, and four months later a 6-inch filigree was implanted under spinal analgesia. He had never had the least discomfort from his gastro-enterostomy, his cæcostomy, or his implantation.

Dr. F. E. **Batten** showed two cases illustrating the value of celluloid splints in the treatment of acute poliomyelitis. He said that the importance of the use of splints in the treatment of the early stages of acute poliomyelitis in order to prevent deformity and hasten recovery was fully recognised, the paralysed muscles being placed in a position of relaxation. It was difficult to obtain one splint suitable for all purposes. It was important to have a splint which is comfortable for the child, out of which it cannot wriggle, which is easily removed, which keeps the leg in a good position, and which can be worn day and night, whether the child is up or in bed. The celluloid splint answered all these requirements, and was especially suitable for this purpose—it was easily made, extremely light, it fitted the leg accurately, and it could be applied within the first few weeks of the onset of the disease, and was not expensive. It could be worn not only during the earlier, but also during the later stages of the disease.

There were three processes involved in making these splints: (1) the taking of the cast of the patient's limb, (2) the making of the positive from the cast, and (3) the moulding of the splint on to the positive. It was the first, the taking of the cast of the leg, which was most important, for it was essential to keep the limb in a good position whilst the cast was being made.

These splints were first made by Calot, of Berck-sur-mer, and introduced into this country by Gauvain, who had used them extensively in the treatment of tuberculous disease of bones and joints.

Mr. E. C. Hughes showed two cases of congenital syphilitic disease of the knee-joint.

Case 1.—A boy, æt. 12. In 1908 the left knee was noticed to be swollen. In 1909 fluid was aspirated from the joint for bacteriological examination; no organisms were found. In 1912 the knee was much swollen, and there was considerable hypertrophy of the synovial fringes. Fluid from the joint was injected into a guinea-pig, with no result. Wassermann reaction positive. In spite of the marked swelling of the joint its functions were not much interfered with.

Case 2.—A girl, æt. 13. Two years ago the right knee was noticed to be swollen. The knee was in a very similar condition to that of the preceding case.

Mr. Donald Armour showed a case of chronic circumscribed inflammation of the corpora cavernosa. The patient, aged 56, noticed a "growth" on his penis twelve months ago, this had gradually grown larger, spreading upwards towards the root of the penis. It was painless. On erection the penis became dorsiflexed at the site of the inflammatory plaque. He had gonorrhœa when a boy, but denied syphilis. Urine was normal.

Dr. James Galloway showed a case of tuberculous peritonitis. The patient, a boy, æt. 10, was sent to hospital with the diagnosis of splenomegaly. The abdominal tumour had been noticed from the beginning of August, but the patient had been ailing for some months before that date. An indurated area could be readily felt occupying the upper portion of the anterior and lateral aspects of the abdomen. Its lowest position was in the central line, where its edge could be defined two finger-breadths below the umbilicus. The indurated mass was very superficial, giving the impression of being incorporated with the abdominal wall, especially in the umbilical area. The skin at the umbilicus and the immediate neighbourhood appeared to be directly adherent to the underlying indurated mass. There was evidence of a small amount of fluid in the abdominal cavity. The glands in the groin were enlarged. A tuberculin cutaneous reaction gave a very doubtful result. There was a slight degree of fever, his temperature varying between 97.4° F. and 100° F. There was no evidence of pulmonary tuberculosis.

One of the glands was removed from the groin on October 1st, and showed characteristic tuberculous structure. The case was brought forward on account of the early and probably extensive tuberculous infiltration of the omentum with adhesions to the anterior abdominal wall and the special involvement of the superficial structures in the neighbourhood of the umbilicus

Also a case of sclerema cutis (adultorum). The patient had attended the meeting of the Section on May 31, 1912. The thickening and induration of the skin at that time affected the face, neck, shoulders and trunk to about the level of the loins, and with scattered areas on the extremity. Movements of the arms, neck and face were very difficult. There was a great improvement in his condition, large areas of the skin having returned to its normal state.

The treatment consisted of vigorous massage during May, June and July, and the early part of August. He had had no special treatment since that time, but had recommenced treatment by massage. The hardening and thickening of the skin was noticeable only on the face and neck, and very slightly on the trunk. The areas still affected were not nearly so firm as when previously exhibited.

Dr. R. Hutchison showed a case of Hirschsprung's disease. The patient, a man, æt. 39, had suffered all his life from constipation with intermittent distension of the abdomen. During the past three or four months the constipation had been intensified, and there had been much flatulent distension without either pain or vomiting. His general condition had remained fairly good.

Section of Ophthalmology.

The First Clinical Meeting of the Section was held on Wednesday, November 6th, 1912, under the Presidency of Sir Anderson Critchett, C.V.O.

Mr. Herbert Fisher showed a case of subhyaloid hæmorrhage, with drawing. He urged the abandonment of the term "subhyaloid hæmorrhage," as the hæmorrhage was intra-retinal; he suggested the words "semi-lunar retinal hæmorrhages." The President agreed with the suggestion.

Mr. A. W. Ormond showed a case of pemphigus of the conjunctiva, followed by essential shrinking. The patient was æt. 24, and his condition as well as his sight were now so bad that he pleaded for something to be done. Mr. Ormond proposed to clear away the conjunctiva as much as possible, and substitute mucous membrane from elsewhere.

Mr. Fisher referred to a case of pemphigus of the canjunctiva, which was later under Mr. Lawford's care, in which a vaccine made from the contents of the patient's own vesicles was administered for some time, but without marked benefit.

Mr. Lawford confirmed the fact that there was no definite improvement after the vaccine treatment.

Mr. Bishop Harman described a very severe and extensive case, involving larynx, pharynx, mouth, and both eyes, in which no treatment benefited.

Mr. R. Greeves showed a case of paralysis of the third nerve with periodic spasm of irido-ciliary muscles. He said he could not make out any relationship between the movements of the two eyes. He thought the right pupil was a little unsteady, but it seemed to have nothing to do with the contractions and dilatations of the other eye. Mr. Herbert described a somewhat similar case, and suggested an explanation, namely, that a portion of the nucleus of the third nerve was non-existent and the other portion of it was weak, so that it was able to overcome the innervation of the higher centres only after an interval of rest.

Mr. Herbert Parsons showed a case of Moorten's ulcer, with ulceration of the sclerotic, and Mr. Leslie Paton demonstrated a modification of Herbert's operation for chronic glaucoma, in which his object had been, while retaining the simplicity of Herbert's operation, to procure a more permanent result. Mr. Herbert described his own attempts in the same direction, emphasising the importance of not reducing the nutrition of the flap too much. The difficulty arose chiefly in subjects who had very shallow anterior chambers.

Mr. E. Nettleship read notes of a case in which a sarcoma of the choroid was seen as a small spot of disease, but its true nature not recognised, about 20 years before the diagnosis of tumour was made, and 25 years before removal of the eye. The case showed the importance of watching over long periods, when possible, the behaviour of certain solitary spots on patches of dusky discoloration that were occasionally seen in the choroid during ophthalmoscopic examination, some of them probably being the beginnings of malignant growth, although others were, no doubt, congenital and stationary. Such solitary, non-inflammatory patches might sometimes be the counterparts of the minute sarcomatous growths, of which nine or ten examples had been accidentally discovered after death and published during the last few years.

Mr. Nettleship also read a joint communication by himself and **Mr. A. Hugh Thompson** on an extensive pedigree of Leber's disease of the optic nerves, which illustrated the occurrence of the malady in females, recovery in some cases in both sexes, descent to all the children of one of the affected women, diabetes with blindness of unknown nature in one member, high infantile mortality in the very large family of one affected man, and absence of influence of the optic nerve disease upon prospect of life.

The President paid a tribute to the labours of Mr. Nettleship in the domain of hereditary disease, and referred to the changes of medical opinion on the subject of heredity. Mr. Hugh Thompson supplemented the paper in respect to one patient, who was a heavy smoker, and suggested that in cases of tardy recovery from tobacco amblyopia enquiry should be made as to any connection with Leber's disease.

Mr. A. W. **Ormond** read a paper on a case of

Retino-choroiditis Juxta-papillaris.

The patient was a man æt. 20 who found, on awaking, that he could not see very well with his right eye. He had had a little pain in the eye a week previously. On examination there was found keratitis punctata, and a patch of acute choroiditis touching the upper margin of the optic disc, and spreading upwards. Œdema of the retina spread over and beyond the patch. Vessels which passed over the inflamed area were partly obscured, and the arteries diminished in size; there was also some haze in the vitreous. Von Pirquet's reaction was positive. The inflammation gradually subsided, and the patient now had full visual acuity, but a large sector of his field of vision, stretching from the blind spot to the extreme periphery, was entirely absent, and he had no perception of light in the area affected. The defective area in the field of vision was clearly due to the obliteration of a branch of the central retinal artery by the pressure of the inflammatory swelling. Under the title retino-choroiditis juxta-papillaris, Professor Jensen, of Copenhagen, published four similar cases in Graefe's Archives in 1909.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF SURGERY.

The President, R. D. Purefoy, P.R.C.S., in the Chair.

Meeting held Friday, October 25th, 1912.

The President thanked the Section and the Council for electing him President. He then briefly reviewed the work of the last Session. He said that physicians and surgeons of the Dublin School had entered into a splendid heritage of traditions and reputations—an inheritance which was not built up without hard work, devotion to their hospitals, and to the students who studied in them. He thought it would be admitted that such a heritage would suffer, and could not be handed down to their successors if they did not pursue the same means.

CASE OF CEREBELLAR TUMOUR TREATED BY DECOMPRESSION.

Mr. A. A. **McConnell** showed a case of cerebellar tumour for which Cushing's sub-tentorial decompression operation had been performed. Before operation the patient had headache, vomiting, partial optic atrophy, vertigo, and ataxia. She was also subject to seizures, in which all the muscles were thrown into a state of tonic contraction. The localising symptoms were:—Tinnitus in left ear; diadochokinesia, which was well pronounced on the left side; and constant deviation to the left side in walking. Optic atrophy was also more marked on the left side. Wassermann's reaction was negative. At the operation a tumour was palpated in the left cerebellar hemisphere. There had been no recurrence of headache, vomiting, vertigo, or tonic muscular spasms since operation. Removal of the tumour was to be attempted at a second operation. Hedonal was the anæsthetic used.

The President asked if the flow of cerebro-spinal fluid had ceased.

Mr. E. H. **Taylor** said that there were two standpoints in these cases:—(1) the diagnostic; (2) the operative. The diagnosis in the present case was very fully gone into. With regard to the operative treatment his experience had not been so satisfactory as Mr. McConnell's. Access was not so easy when the patient was lying on the side as when in the face down position. He agreed that it was well to expose both hemispheres of the cerebellum, and he thought the bilateral exposure was to be preferred.

Dr. **Denham** suggested that there was still a great deal of bulging, and he would like to know whether there was at present a greatly increased intracranial tension, and whether this was attributed entirely to the tumour or to the increase of the cerebro-spinal fluid. He also asked if urotropine was indicated in these cases.

Mr. **Pearson** said it was to be regretted that cases of the kind were not got in earlier stages by the surgeon. When optic atrophy sets in the patient's sight could not be restored. He considered that even if the growth was believed to be a gumma it was no reason why the case should not be submitted to surgical treatment. The patient's speech at present seemed somewhat slurring and slow, which he thought should be regarded as a symptom that there was some pressure on the bulb.

Mr. **McConnell**, replying to the remarks, said with regard to the President's inquiry the cerebro-spinal fluid discharged very copiously from the eighth to the tenth day and then the sinus closed. During operation the patient was kept in the prone position, and there was free access to the seat of operation. Although before operation the patient had optic neuritis far advanced on the left side and considerably on the right, yet her sight improved immediately after operation, but it had since deteriorated.

HEDONAL AS AN ANÆSTHETIC.

Mr. H. de L. **Crawford** read a paper on this subject, for which *see page* 515.

Mr. W. I. de C. **Wheeler** thought the question of anæsthesia was not in a satisfactory state at present. As to hedonal, he considered that its administration could not be praised or condemned until there was more experience of it. In his opinion there was sometimes a difficulty in giving the anæsthetic, as patients very often objected more to the giving of an intravenous injection than to the operation. He mentioned that he had been using omnopon in simple operations, and so far had found it satisfactory. When given before the administration of ether, patients when anæsthetised would remain so for hours. There was a complete absence in every case of anything in the nature of cyanosis.

Dr. **Kirkpatrick** had not seen hedonal used, but it seemed to him, from the theoretical point of view, that it was attended with great advantages and some considerable disadvantages. It was admitted that present methods of anæsthetising patients were not altogether satisfactory. Whether it was the fault of the methods or the patients, it was exceedingly hard to get satisfactory relaxation of the muscles, especially in pelvic operations, and the surgeon might be very considerably hampered in his work on this account; consequently, any method that would improve this state of things would be of very great value. He had seen so many methods of using different drugs as anæsthetics introduced that it made him doubtful, as over and over again, notwithstanding new methods being put forward as panaceas, return had to be made to ether. He therefore thought that no one had yet sufficient experience to be able to pronounce definitely on hedonal. Regarding the point that the anæsthetist could administer hedonal so that he could be out of the way of the operator, it should not be lost sight of that, no matter how the anæsthetic was given, the anæsthetist must have access to the patient's head.

Dr. **Walter Smith** said that so far all forms of anæsthetics administered by inhalation, excluding morphia, belonged to the marsh gas series. Local anæsthetics belonged to the aromatic group. He demonstrated by formulæ how the various forms were built up, taking marsh gas as a base.

Mr. **Crawford**, in replying to the remarks, said his experience was that patients would rather have the small operation necessary to administer hedonal than to have the mask placed over their face. He considered that it was much more under control than omnopon. With regard to the danger of cyanosis, if the anæsthetist was at the patient's feet instead of at the head, he found it necessary to stay at the patient's head, and to signal when the tap was to be turned off. He considered the anæsthetic as safe as any other in practice.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Special Clinical Meeting, held on Friday, November 1st, 1912.

The President, Dr. G. P. **Shuter**, in the Chair.

The following cases were examined and discussed:—

Mr. **Aslett Baldwin**: (1) Tuberculous Disease of the knee-joint in a girl, æt. 12. The right knee-joint was distended with fluid, there was some thickening of the synovial membrane, but a remarkable absence of pain, tenderness and rigidity. The disease dated back about 8 months. There were no signs of congenital syphilis, a Wassermann reaction was negative, but a positive von Pirquet reaction was obtained. (2) A man, æt. 54, from whom an epithelioma of the inner side of the right cheek was excised six months ago, together with the glands on the same side of the neck. There were no signs of recurrence, but a patch of leucoplakia developed recently on the inside of the opposite cheek and was removed as a precautionary measure. (3) Rodent ulcer on dorsum of hand in a woman, æt. 68. It was proposed to treat it with zinc ionisation, and subsequently with radium if necessary.

Mr. E. P. **Isaacs Coke** showed an interesting case of Polycythæmia in which the erythrocytes varied between 6 and 12 millions. The complexion of the man during ten years under observation had always been of a deep red hue, the mucous membranes almost purple, and the conjunctivæ injected. Before a severe hæmorrhage, following the extraction of some teeth, the spleen was two inches below the costal margin, and was only just palpable a month later. The patient suffered from headache, giddiness and general weakness. Rest seemed to be the only treatment from which he derived benefit.

Mr. T. C. **Storey** (for Dr. H. J. **Davis**): (1) Labyrinthine Vertigo in a woman, æt. 33. The attacks began three years ago and were getting much more severe, but she never lost consciousness or vomited. Examination showed the right ear to be normal, but on the left side there was absolute deafness. Tests suggested that the left labyrinth was not entirely destroyed. (2) Hernia Cerebelli in a boy, æt. 8, following the evacuation of a cerebellar abscess six months ago. The hernia was kept bandaged under pressure and had completely disappeared.

Dr. **Grainger Stewart** remarked that in his experience this was the most successful method in dealing with cerebral herniæ.

Mr. H. **Tyrrell Gray**: (1) A boy from whom a Naso-pharyngeal tumour was removed ten months ago. The tumour, which proved to be a myxo-fibroma, grew from the base of the skull and left inner antral wall, the septum being pushed over to the right side. (2) Case for diagnosis. Achondroplasia possibly, but Mr. **Addison** suggested it might be some inflammatory condition. An X ray of the hand was shown

Dr. F. S. **Palmer**: (1) and (2) Friedreich's Ataxia in a brother and sister, both presenting the characteristic features of the disease. The sister was 18 years of age and the brother two years younger, and in each case the disease seemed to have some relation to an attack of influenza acquired about three years ago. The only other child in the family, a brother, æt. 19, was healthy, both parents were alive and well, and no history of nervous disease could be traced in previous generations, nor among the collateral branches. (3) Rheumatoid Arthritis. On a previous occasion when this patient was shown at one of the society's meetings there had been some discussion as to the nature of a swelling in the region of the left shoulder-joint. The swelling had since been explored and found to be a large thick-walled bursa under the deltoid.

Mr. J. **Pardoe**: Large Cyst of the Pancreas drained, at the first operation, through an epigastric incision, the stomach and transverse colon being densely adherent to the cyst wall. After slow refilling of the cyst a second operation was performed, and the cyst was drained by an extra-peritoneal incision through the loin. The cyst was now filling again, but much more slowly.

Mr. **Tyrrell Gray**, Dr. **Shuter**, and Dr. **Ogier Ward** made suggestions in the event of another operation being necessary.

Dr. H. **Pritchard**: Aneurysm of first part of the Aorta coming through sternum in the region of the third right costal cartilage. The man was 43 years of age, had been in the army and served through the South African War. Dr. Pritchard drew attention to the signs of pressure on the superior vena cava, not a common phenomenon, but well seen in this instance. The patient gave a positive Wassermann reaction, and had much improved under treatment with iodides and rest.

Dr. A. E. **Saunders** and Dr. A. C. D. **Firth** presented a series of eight Cretins and two children affected with Goitre. Dr. Saunders usually gave 3 grains of thyroid extract three times a day, during the growing period, in well-marked cases. In one of his patients, however, a girl, æt. 4, ½ grain doses three times daily produced tachycardia. The boy, æt. 9½, had grown 4½ inches since commencing treatment 8 months ago. The young woman of 17 he had brought before the society 13 years ago. The brother and sister affected with goitre, æt. 12 and 11, were the children of a father who suffered from a large goitre from the age of 14 to the age of 20 when it disappeared, and they did not show signs of cretinism. These cases were allied to the cases of goitre with cretinism which occurred in the Swiss Valleys and Peak District, whilst in cases of sporadic cretinism the occurrence of goitre was certainly the exception. Dr. Firth, when showing his four cretins, desired to draw attention to the fact that frequently at the commencement of thyroid treatment the patient became bald, and afterwards grew a stronger and thicker crop of hair. Also that occasionally an overdose of thyroid might result in the production of glycosuria. The girl, æt. 14, mentally rather backward, developed slight glycosuria on taking 7 grains daily. She had been under treatment since the age of 6 months, and now took 5 grains daily. During the last 12 months the right lobe and isthmus of the thyroid had shown signs of swelling. The girl, æt. 2½, commenced treatment at the age of 8 months and was taking 3 grains daily, with excellent results.

Dr. T. **Grainger Stewart**: Pituitary Tumour in a man, æt. 52. Progressive failure of vision during the last 17 years, commencing in the temporal fields, had reduced the patient to such a condition that he only retained a reduced nasal field in the left eye. He became pale, waxy-looking and adipose. Loss of hair was a marked feature, and he showed regression towards the female type. Testicular atrophy developed years ago, and along with these changes an increase in the size of the hands and the malar region of the face There was an increased sugar tolerance, and an X-ray examination revealed enlargement of the sella turcica. Some signs of acromegaly were present, but in the main the symptoms pointed to a loss of function of the posterior lobe, or hypopituitarism.

Mr. **Bishop Harman** referred to two cases he brought before the society last year. They had been under treatment for two years and had remained quite stationary. In one case thyroid extract, 15 grains per diem, was administered for a month, then a rest for a fortnight; the patient said she appreciated an improvement in her condition each time she resumed the extract. In the other case a man who lived in the country attended the local slaughter-house and extracted the pituitary body of sheep and oxen for immediate consumption. In neither case had any acromegalic symptoms appeared.

Dr. J. **Bernstein** exhibited two cases of Glossitis due to syphilis, and wished to point out the frequency of a negative Wassermann reaction associated with chronic tertiary lesions in acquired or congenital cases: (1) A woman, æt. 35, suffering from Congenital Syphilis. The tongue showed chronic thickening with fissures, and obstinate dyspepsia was a secondary result of the painful condition of that organ. In spite of the presence of Hutchinson's teeth and a family history of syphilis the Wassermann reaction was negative, but the latter will not prevent immediate treatment with 606. (2) Woman, æt. 75, chronic superficial glossitis of a different type, the tongue being glazed. Wassermann reaction positive.

THE LIVERPOOL MEDICAL INSTITUTION.

First Pathological Meeting of the Session, held on Thursday, October 31st, 1912.

Mr. F. T. Paul, Past President, in the chair.

The evening was devoted to the consideration of

Malignant Diseases.

The following specimens were shown:—

Mr. **Courtenay Yorke**: Carcinoma of the œsophagus which had involved both recurrent laryngeal nerves. During life there was complete paralysis of the larynx.

Dr R. E. **Harcourt** and Mr. **Bickerton**: (1) Epibulbar melanotic sarcoma in a woman æt. 37. (2) Perithelioma of the orbit in a woman æt. 73.

Mr. **Arthur Evans**: (1) Carcinoma of the cervix uteri (two cases). (2) Annular carcinoma of iliac colon. (3) Epithelioma of mouth. (4) Epithelioma in appendix scar. (5) Epithelioma of penis. (6) Malignant testis.

Dr. **Buchanan** and Dr. **Lissant Cox**: Carcinoma of an accessory thyroid or of the thyroglossal duct.

Mr. **Douglas Crawford** and Dr. S. W. **McLellan**: (1) Malignant disease of lower end of œsophagus. (2) Malignant disease of colon. (3) Malignant disease of breast; recurrence; X-ray treatment.

Mr. **Thelwall Thomas** and Dr. **Rees**: (1) Papilloma of prepuce, early malignancy. (2) Malignant breast, showing pigmentation due to hæmorrhage from previous operation. (3) Malignant bladder and secondary glands. (4) Endothelioma of parotic. (5) Epithelioma of scrotum.

Mr. R. E. **Kelly**: (1) Carcinoma of small gut. (2) Lympho-sarcoma of neck.

Mr. G. P. **Newbolt**: Carcinoma of the hepatic flexure of the colon.

Dr. **Nathan Raw**: (1) Osteo-sarcoma of lung (secondary). (2) Lympho-sarcoma of lung. (3) Lung showing cancer and tuberculosis. (4) Sarcoma of the heart.

Mr. F. T. **Paul** gave a very instructive photomicrographic demonstration with lantern slides of epitheliomata of varying degrees of malignancy. He pointed out how an accurate prognosis could be given from the appearances of the sections. His opinions had been confirmed by the subsequent histories of the cases.

Dr. **Blair Bell** showed a fox-terrier bitch æt. 16½ years. Two years ago a lump appeared in the right inguinal mammæ following long continued mastitis. This lump was excised under B-Eucaine anæsthesia. Six months later a recurrence occurred locally. Both inguinal mammæ with all the inguinal fat and glands (which were affected) were then removed under ether anæsthesia. Perfect recovery was made, but now there is a recurrence in a gland lying superficial to the ribs on the right side.

Dr. **Hubert Armstrong** read a note on a case of *endothelioma of the heart*, and demonstrated the sections and drawings made for him by Professor Mönckeberg. The tumour was a lymphangio-endothelioma of the A.—mode, causing heart block with Stokes-Adams syndrome in a boy æt. 5 years. The case has been reported in full elsewhere. (*a*)

Dr. **Wakelin Barratt** read a paper on

Recent Experimental Investigations in Regard to the Production of Immunity to Carcinoma.

Dr. Wakelin Barratt first compared the histological characteristics of mouse carcinomata with human carcinomata. He illustrated his remarks with a series of lantern slides. He also pointed out the differences in the way the two types of malignant disease progress, and produce death. He next dealt with the experimental work which has been carried out on mice to produce immunity to or to cure mouse carcinoma. He called attention to the fact that many living tissues from the mouse or the fœtal mouse appear to have the power of producing immunity or of arresting the growth. He emphasised the fact that the tissues used must be living.

Mr. F. T. **Paul** thought the cure of carcinoma by therapeutic methods was far distant, but hoped that experimental research would be continued with vigour.

Dr. **Blair Bell** believed that a method for treating cancer therapeutically was within sight; if not absolute cure, at least one which would supplement surgical precedures. He mentioned some of his own attempts to arrest the disease in the human subject.

Mr. **Rushton Parker** congratulated Dr. Barratt on his lucid paper, and alluded to the excellent work Dr. Barratt has already done. He was particularly impressed by the modest and restrained manner in which the various facts had been brought forward. It was most important that no false hopes should be raised.

ULSTER MEDICAL SOCIETY.

The opening meeting for the winter session was held in the Medical Institute, Belfast, on Thursday evening, November 7th, 1912.

The retiring President, Dr. H. L. **McKisack**, introduced his successor, Dr. R. W. **Leslie**, who delivered an address on

The Infectious Diseases Incident to School Life, Their Early Recognition, Treatment, and Control.

In accordance with custom, Dr. Leslie referred to the losses sustained by the society during the past year. Two former presidents have passed away—Dr. Henry Whitaker, who for more than fifteen years was medical officer of health for the city, and Lieutenant-Colonel Macfarland, who after twenty years' service in the army engaged in private practice in Belfast, and was well known as an ardent temperance reformer. Dr. Stuart Dickey, who had just arrived in Canada to enter on his work as professor of anatomy in Montreal; Dr. R. C. Parkes, of Newtownards, and Dr. John Simson, who was lost in the "Titanic," were also referred to in feeling terms. After some reference to the Insurance Act, Dr. Leslie said that his choice of subject had been decided by the fact that for 18 years he had acted as medical officer to one of the largest boarding schools in Ireland (the Campbell College). During those years he had medical charge of 125 residents, on an average, and among them there were frequent outbreaks of infectious ailments. It was notable that these outbreaks nearly all occurred in the winter half of the year, and chiefly in February and March. The commonest ailment by far was measles, but the most important, from various points of view, was scarlatina. The difficulties that arose in diagnosis were great, and as the result of his experience he would repeat the Scriptural warning, "Let him that thinketh he standeth take heed lest he fall." He gave particulars of the epidemics, and remarked on the difficulties of tracing their beginnings. He believed the initial stages of scarlatina were the most infectious. He agreed with Dr. Clement Dukes's warning about the necessity for careful watching in every case of sore throat. Referring to measles, Dr. Leslie said that it was remarkable that they had never had a case in the school between April 1 and September 30 in any year. Mumps came second

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(*a*) "Deutsch. Archiv. f. Klin. Med.," March 13, 1911.

to measles in frequency, and in several cases acute pancreatitis had occurred as a complication, with alarming abdominal pain, vomiting, and collapse. Orchitis occurred in more than 10 per cent. of the cases, and in these the constitutional symptoms were generally severe.

At the conclusion of the address a vote of thanks to the outgoing President, Dr. MacKisack, for his conduct during the past year, and to the incoming President, Dr. Leslie, for his interesting address, was moved by Professor LINDSAY, seconded by Professor Sir WILLIAM WHITLA, and passed by acclamation.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 9th, 1912.

ANGINA PECTORIS.

ANGINA PECTORIS, provoked by walking or by an effort, is due, says Dr. Fiessinger, to divers causes: coronitis with obliteration of the coronary arteries or aortic insufficiency, myocarditis, hypertension of interstitial nephritis, obesity and aerophagia. The two last causes can be easily cured by dietetic *régime* (lacto-vegetarian).

Coronitis of specific origin yields to the mercurial treatment; aortic insufficiency is amenable to small doses of iodides, while the pain due to interstitial nephritis may be successfully treated by very small doses of digitaline, theobromine and laxatives. The same treatment holds good for mitral insufficiency.

All the former are relieved by small doses of morphia, nitrites, prolonged rest in bed and light repasts (seven daily). By these means persons of 70 years of age and upwards may be completely relieved provided the dietetic treatment be prolonged one or two years.

In patients suffering from dilatation of the stomach with great flatulence the diagnosis is very difficult, but morbid syncope due to extreme distension by the gases is very rare.

The distinction between true angina pectoris and nervous angina, described by Professor Robin in dyspeptic patients with secondary fermentation, is easy by assuring oneself of the integrity of the cardio-vascular system and the presence of gastric disturbance, repetition of the attack after meals and their cure by *régime*, saturation of the gastric secretion after food by the administration of alkalines.

The prognosis of angina pectoris, says Dr. Fiessinger, is consequently not so sombre as one may think.

A CURIOUS CASE OF LEAD POISONING.

A curious case of lead poisoning from a gunshot-wound is reported by Dr. Lombard, of Algiers. A lad of 15 received the charge of a shotgun in the hand and forearm. The wound was disinfected with tincture of iodine, the palmar artery tied and a suitable dressing applied. The bones were untouched, but the grains of shot were so numerous and so disseminated that the surgeon had either to abandon them or amputate the forearm. However, the temperature was normal, no local inflammatory reaction, although the forearm was very swollen, the appetite was good and sleep natural.

During twelve days his general condition remained satisfactory, while the œdema rapidly disappeared. But soon anæmia set in, with insomnia, headache, vertigo, wasting. On account of these symptoms, the parents objecting to amputation, an attempt was made to extract some of the shot grains; the muscles when cut were found to be greenish and friable! An elastic band was placed above the wound to prevent massive absorption, and the wound was dressed. The patient, who had previously complained of colic and vomited some greenish matter, succumbed ten hours after the operation.

Here was a rapidly fatal case of acute lead poisoning three weeks after the traumatism and in a healthy individual

While a relatively large isolated bullet is frequently well tolerated, small and numerous projectiles disseminated in vascularised muscles are more dangerous as their absorption by the post-traumatic œdema is always possible. Hence the necessity of sacrificing the wounded region as soon as the condition of the blood reveals the effects (rapid decrease of the red corpuscles with granular alteration) of saturnine intoxication.

THE TRAFFIC IN HUMAN HAIR.

Traffic in human hair is growing extensively since fashion imposes the wearing of chichis on our fair sisters. China is the great exporter of hair, and the best market is New York, whither 282 tons were sent last year, representing £150,000. But Vienna, London, and especially Paris, are not much behind.

The hair from China does not come from the dead, as was often feared, but almost exclusively from hair falling during the toilette of the Celestials, collected with care by hairdressers and servants.

For many years the hair was exported in the "raw" state—that is to say, with no other treatment than the disinfection imposed by the sanitary service. But recently several manufactories have sprung up, one of which employs no less than 600 hands. Here the hair is combed and washed in a bath containing soda, black soap, and ammonia; after drying in a current of hot air, the hair is plunged for 24 hours into a vat of boiling water. It is finally sterilised in an autoclave, and then receives the colour desired, as there is very little use for black hair.

Some years ago the region of Limoges, in the centre of France, and some parts of Brittany were great markets for human tresses; the young peasant girls sacrificed, however reluctantly, their luxuriant hair against one or two hundred francs, but to-day the belles prefer keeping the ornament nature has so richly provided them, and refuse the tempting offers. On the other hand, the market has considerably fallen on account of the competition from the East.

GERMANY.

Berlin, Nov. 9th, 1912.

AT the 84th meeting of the Naturforscher und Aerzte, in the Pathological Section, Hr. Heller, Kiel, spoke on

REGENERATION OF THE MUSCLES OF THE HEART.

It was a well-known fact, he said, that voluntary muscle could to a great extent regain its volume and capacity for function after it had undergone degenerative processes after acute febrile diseases. Such a regenerative power on the part of the cardiac musculature had not yet been generally recognised. The newest work on pathology did not mention it at all; this was the more striking as there were sufficient clinical observations known to compel an acknowledgement of such a regenerative power on the part of the heart muscles. Thus White had reported on 78 patients, who, after diphtheria, had left the Boston Hospital with cardiac disturbance; the majority of the cases showed a marked dulness extending to the left, they also had systolic murmurs, etc. He observed these cases further, and found that they mostly improved; in 17 per cent. of the cases, however, the symptoms remained for more than six months; but with these also the progress was mostly favourable. Dieteren found dilatation of the heart 15 times in 47 cases. This dilatation must be the result of a degenerative process. If a transient dilatation could be recovered from and explained on the ground that the affection was only slight, a restitution after months of dilatation could only be due to regeneration of the cardiac muscles. This conclusion, as far as the speaker knew, had never been brought forward. He believed he should be able to show the truth of it through his own observations. As early as the year 1889 he saw the regenerative process in the case of a boy of 10, a patient of a colleague. The boy had died from an embolism springing from the left ventricle. There were all the transition stages from the finest spindle cells with two or three transverse striæ at every nucleus end to longer delicate striped muscle on to the normal.

He had followed these observations further, and found that such regeneration often took place extensively. There were great difficulties in prosecuting the inquiry, as the striping was not well retained, as the patient often died from some febrile affection. But, as the preparations showed, such regeneration frequently did take place. The changes that took place were many. The nuclei of the muscles often showed enlargement, increase in number and great facility of staining, so that often true multinuclear giant cells appeared; these muscle "buds," however, did not go on to further division with formation of young muscle, and he had never been able to satisfy himself that he had seen fibres given off. The four preparations shown showed all the transitions from simple incurving to almost complete separation, so that before the complete division the nucleus represented the figure of a long-drawn-out horseshoe. The nuclei showed a further change in that they lengthened often to three, or four, or five times their ordinary length. Romberg had seen such fibres of a length of 160 micra. They were often arranged lengthwise; there then appeared two or three small nuclei close together, especially at the end of the muscle fibres. These were then frequently split up into numerous small nucleated processes, concluding with a longer and wider covering of myogene fibre. These developed into delicate bands containing two or three small nuclei, in which when quite fresh striæ were to be seen distinctly. All these processes were met with in the diseased myocardium.

With all these, which might be looked on as processes of regeneration of muscle, there were in greater or lesser numbers all possible cellular elements—leucocytes, lymphocytes, plasmo cells—which often made recognition of the more delicate elements more difficult. The preparations shown illustrated the very varied character of the changes. They were taken from a number of children who died from diphtheria, also from older individuals who had died of myocarditis; in four of the cases the myocarditis was apparently on a syphilitic basis. Clinically, with such children with post-diphtheritic heart symptoms it was of the utmost importance that the heart should be protected from all strain; time must be allowed for regeneration. If time was not allowed for this the bulging of the lower part of the left ventricle would become greater; in this depression there were layers of fluid not in motion, which in the altered heart might easily lead to thrombosis. The speaker had seen several such cases. Moreover, it was of further importance that time should be allowed for the thrombus to get covered with an endocardial covering; it was thereby rendered harmless.

AUSTRIA.

Vienna, Nov. 9th, 1912.

Chronic Cardial Spasms and Dilatation of the Œsophagus.

At the opening of the Gesellschaft der Aerzte, Heyrovsky exhibited a patient from Hochenegg's clinic, who had suffered from chronic spasms of the heart with extensive dilatation of the œsophagus. The patient had been treated for 14 years with Gussler-Gottstein's dilator to relieve the spasms, but without success. Sounds of different construction had been used from time to time, but with no better effect. A year ago he was taken into hospital as the inanition was so painfully evident that something must be done, and gastrostomy was performed. Feeding through the fistula did very well, as the patient put on 10 kilograms. In January of this year the idea of a suture passing from the gastral opening to the mouth was conceived, and a balloon attached to it, so that it could be passed into the stricture from below and dilatation effected. After three months' treatment with soundings, the lumen is now distended to 20 centimetres. It is six months since the last operation was performed, but the patient is able to swallow all kinds of food without the least discomfort. In the six months he has put on 19 kilograms of body weight, although the wound is not allowed to heal up yet.

Urethral Fistula.

Bachrach brought in a patient from Zuckerkandl's ward, who had a fascial-plastic operation performed on the penis. The patient was 18 years, and had suffered from this dehiscence of the ventrum of the penis for eight years. The ventral opening in the urethral wall was in the middle of the shaft, and had been caused by the careless tying of the organ destroying the circulation, and producing gangrene and necrosis. The dorsal side of the urethra was entire, and the mucous membrane continuous. Rawing and stitching the mucous membrane was first performed, then an excision of a fascial flap taken from the upper part of the thigh and fixed with stitches over the mucous membrane, that had been drawn together. The wound healed per primam, and has now made a good recovery. He further stated that he had met with great success with this fascio-plastic operation in hernia, where it had frequently occurred.

Stuttering.

Fröschels gave a pathological description of stuttering which he considered physical and mental. Among the physical symptoms deviation of the tongue was a serious defect, being drawn back on one side by hypertrophy. Again, the hemi-hypertrophy of the lips and muscles of the cheek caused a spasmodic movement. These were only physical adjuncts to the functional disturbances which appear as tonic and clonic spasms. The breathing deviates from the normal, both in rhythm and intensity. Another important factor is the functional disturbance of the nervous system, as indicated by the patella and reflex of the jaw; but when patient is alone, he can speak fairly well. Many have a dread of special words and sounds, and are afraid of imitation, and may affect other children. Heredity must also be considered in these cases, as the tonic and clonic movements depend largely on the nerve system in the vocal apparatus, which is clearly marked by the loud expression of some distinct letters or consonants, or the pressing in of words or embolophasia. Stern said he found in many cases of stuttering asymmetry of the face in the form of degeneration, and also the stuttering was bad when alone, and worse after a pause of thinking, which he thought was the exciting cause. Friedjung said many of these children developed a stuttering habit by fondling parents and pampering the child, which could be easily corrected if properly educated. Fröschels said that Stern's observations applied to the hypertrophy he mentioned at the beginning. The stuttering, when alone was mostly after thinking when attempting to correct himself, but he had one case where the thinking corrected the stuttering altogether.

UNITED STATES OF AMERICA.

Washington, Oct. 12th, 1912.

International Congress on Hygiene and Dermography.

(Concluded.)

The section dealing with

Child Hygiene

produced a large volume of papers, some of which were quite exceptionally good, and were referred to in my last report. Among the best papers in this section were several by women. Dr. Mary Sutton Macey, of New York, contributed a paper on instruction in child hygiene. Dr. Grace Kimball, of Poughkeepsie, discussed the hygiene of the teacher. Drs. Caroline Hedger, Louise Montgomery, and Caro McArthur, gave the results of studies of a large number of the school children of the stockyards district of Chicago.

Perhaps the most important meeting of the Congress was that of the joint sessions of the sections of

Hygienic Microbiology and Parasitology,

and of the control of infectious diseases. This meeting was really a symposium on poliomyelitis, in which some of the greatest authorities in the world took part.

Dr. Netter, of Paris, dealt with the ætiology of poliomyelitis and phophylactic measures; Dr. Francis Harbitz, of Christiania, Norway, discussed epidemic poliomyelitis in Norway. Sanitary measures against the disease were debated by M. Levaditi, of the Pasteur Institute, Paris; Dr. Karl Landsteiner, Vienna; Dr. Simon Flexner, Rockefeller Institute, New York City; Dr. Paul Romer, Marburg, Germany; and Dr. M. Neustaedter, New York City. On the whole, the most valuable contribution to the meeting, and one of the most valuable contributions to the literature of the subject was made by Professor Alfred Pettersson, of Stockholm, Sweden, who gave a *résumé*, or rather an epitome, of the results of the investigations undertaken by him and colleagues for the State Medical Institute of Sweden. Dr. Pettersen and co-workers found that the disease is mainly conveyed by direct transmission, and that the naso-pharynx is the means of entrance of the virus. These investigators are of the opinion that flies are a negligible quantity in the transmission of disease.

Tropical Hygiene,

was another vastly instructive part of the Congress. Of course, malaria was fully dealt with. Dr. Harald Seidelin, of Liverpool, propounded a theory as to the causation of yellow fever, which found little favour with American army authorities. He stated that he regards yellow fever as due to Piroplasma flavigenum, and transmitted by Stegomyia fasciata. He thinks it is probable that microbe-carriers exist in yellow fever as they do in the very similar disease babesiosis. Hookworm disease was thoroughly discussed, and Surgeon-General Rupert Blue, U.S. Public Health Service, read a paper on the municipal control of plague. Military and Naval hygiene was fully considered. Lack of space will not permit a more exhaustive review of the very numerous, voluminous, and occasionally important papers read at the Congress. It may be said that no epoch-making discoveries were announced.

The lesson to be learned from the meeting was that the next step is to apply the knowledge already gathered. We know enough, if properly applied, to very greatly reduce the death rate, and to diminish the occurrence of disease. An educative campaign is now needed to hammer into the heads of the public the laws of health. Hygienic teaching should be made popular, and the elementary laws relating to the care and protection of children, the methods by which infectious diseases are spread, and, above all, the modes of life calculated to ensure health, should be drummed into the ears of mothers and children. A congress like the one just held in Washington is chiefly useful as a means of wide advertisement, not of the individual who reads a paper, but of the matter contained in the papers relating to public health.

An hygienic exhibition was held in connection with the Congress, which was excellently descriptive of subjects concerned with health. Over one part of this exhibition, however, discussion waxed hot and furious. One of the exhibits illustrated various phases in the progress of syphilis, and was denounced by a medical man from New York as no more nor less than a veritable chamber of horrors. The argument of those who were responsible for the somewhat gruesome collection, was that it was in a high degree educative. The reply of those who objected to it was that, although fearful to behold, it was not necessarily deterrently educative, but rather appealed to the love of the morbid, which is inherent in most human beings, and, moreover, tended to harm any young people who witnessed it.

The exhibit was closed but the discussion thereof is by no means closed.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

EDINBURGH.

Mental Deficiency Bill.

A deputation from the various District Lunacy Boards in Scotland has waited on the Lord Advocate, to lay before him certain questions raised by the application of the Mental Deficiency Bill to Scotland. Among the points of medical interest raised was the question whether defectives who had come under the Inebriates' Act should be treated under the new measure, the view of the deputation being that such should not be the case. The other suggestions made were of a purely administrative nature.

Edinburgh Royal Infirmary and the Insurance Act.

It will be remembered that during the summer the staff of the Infirmary made representations to the Board of Management as to the treatment of insured persons in the Infirmary, and that in consequence the Managers passed a series of resolutions declaring in effect that unless urgently requiring hospital treatment, insured persons were ineligible for admission to the infirmary or its out-patient departments. At a recent meeting of the Board notice was given of motion to rescind these resolutions; but when the motion came up it found no seconder, and the managers adhered to the determination arrived at. Moreover, in all the circumstances, they decided that the discussion should be taken as public business, and that a full report of the resolutions questioned should be sent to the Press.

The Insurance Act and the Medical Profession in Edinburgh.

The financial proposals of Mr. Lloyd George have done nothing to render the regulations more palatable to the profession in Edinburgh, nor to make them alter their decision to stand out from service under the Act. The conditions attached by the Chancellor to his increased offer are regarded as peculiarly objectionable, particularly the reports required, and the implied inspection and supervision. A meeting of the local division of the B.M.A. has been summoned to consider the instructions to be given to the representatives, and there is practically no doubt that the decision will be to stand out against serving under the Act. As to what will actually happen in relation to clubs after January 15th, no one is yet in a position definitely to say; but the belief among those who have resigned their appointments is that after that date they will attend former club patients on the same terms as their ordinary patients of the same class. It seems as though the system of club practice has received its quietus in Edinburgh, through the agency of the Insurance Act.

GLASGOW.

Glasgow University Court—Question of Inclusive Fees.

At the meeting of the Glasgow University Court, held on November 7th, communications regarding the question of the inclusive fees were read from the Courts of St. Andrews and Aberdeen Universities, and from the Senate and General Council of Glasgow University. St. Andrews University intimated that they had adopted the recommendations of the Conference of the Courts of St. Andrews, Glasgow, and Aberdeen, and had arranged to introduce inclusive fees in medicine and applied science at the beginning of the academic year. Aberdeen University approved generally of the recommendations. The opinion of the Glasgow Senate was that the Faculty of Science was in general agreement, and the Medical Faculty, also; but the General Council represented that further inquiry was necessary, both as to the amount of the fee and its bearing on extra-mural schools, which had in the past co-operated so efficiently in the training of medical students. No communication on the subject was received from Edinburgh, and Sir David McVail said that, seeing that Edinburgh refused to commit themselves, he wondered whether it was worth while considering the matter at the beginning of the session, since the Treasury had stated that they were not going to give the remainder of the money until the four Universities had adopted the inclusive fee in medicine. Principal McAlister remarked that medicine clearly was going to be a difficulty, and suggested that a small committee be appointed to look into the matter. Sir David MacVail said that, in his opinion, Glasgow was much more closely associated with Edinburgh in this matter than with Aberdeen or St. Andrews. In Edinburgh extra-mural teaching was at its acme, and in Glasgow it was increasing, whereas in the other Universities there was little or no extra-mural teaching. Edinburgh, so far as he could learn, was going to have nothing to do with an inclusive fee, and he thought they should let the subject alone until they knew definitely what Edinburgh was likely to do. After further discussion, in which the Principal, Professor Gray, and Professor Muir took part, it was agreed to appoint a committee to consider the matter and report.

Medical Certificates and the School Boards.

The newly-formed Monkland Medical Association passed a resolution to the effect that they would not grant medical certificates in cases of children not attending school unless the School Boards pay for them, and thus a difficulty has arisen in the Airdrie district. The cause of this is stated to be that certain of the Boards insist on the certificates containing the Soul and Conscience Clause, and thus being the same as are produced to the Court. These Boards maintain that if such certificates are produced to them prosecution of the parents would be unnecessary, otherwise they have no alternative but to bring the parent into court, and the parent has to bring the doctor at his own expense to substantiate his defence. Several cases came before Sheriff Lee recently, and the state of matters being explained, the Sheriff said he had nothing whatever to do with the dispute between the Boards and the doctors, neither of whom needed any assistance from him; but he thought parents should be protected from needless expense and trouble. He did not think that in order to settle the issues between two bodies such as the Medical Association and the School Boards, people should be put to the expense of losing a day's work and incurring expense, and if he could devise some method of protecting the parents against such a hardship he should do so.

Paisley Doctors and the Insurance Act.

The Paisley medical practitioners have had under consideration their position in relation to the Insurance Act, and, on the motion of Dr. John Holms, have decided to work under the Act; but it has been considered advisable not to officially notify the local secretary, Mr. T. Hunter, until after the meeting of the British Medical Association next month.

BELFAST.

The Babies' Home.

An excellent institution was founded in Belfast last year by the Children's Aid Society—a Babies' Home. It serves two purposes, as it is not only a home for the children who come under the care of the Society, but it is also a training school for nurses, who receive practical instruction from the matron, and lectures from the medical staff. There are at present twelve probationer nurses, and five others who have completed their training have found ready demand for their services at £25 per annum. At a meeting held in the Home last week, Dr. Henry, Dr. Rusk, and Dr. Dr. J. Shaw spoke in the highest terms of the equipment and work of the institution, and the admirable training which the nurses receive. The superintendent of the Children's Aid Society said that in the nine months during which the Home had been working, 77 children had been admitted, of whom 39 were still in, 18 had been restored to friends, 13 had been boarded out, two adopted, three sent to hospital, and two died. On the basis of a payment of £1 per month for each child, in addition to the fees paid by the nurses for their training, the Home was expected to be self-supporting.

Belfast Guardians and Medical Officers' Salaries.

The Infirmary Committee of the Belfast Guardians have been considering the resolutions of the Belfast Medical Guild, that in their opinion no locum tenens to any dispensary appointment should receive less than five guineas per week, and that the minimum salary for a resident medical officer should be £140 per annum. The Committee received a deputation from the Guild, and also inquired about the salaries paid by other Boards, and eventually they have recommended that in future the minimum salary for resident medical officers at the Workhouse Infirmary, and at the Abbey Sanatorium, be £130 per annum, rising by annual increments of £10 to £150, and that the question of the payment of locum tenens in dispensary districts be referred to the Committee under the Medical Charities Act, for consideration and report. The deputation from the Guild thanked the Committee, and expressed satisfaction with their proposals, and also with the decision of the Guardians to prohibit canvassing for appointments of resident medical officers.

Maternity Nursing Scheme.

At the last meeting of the Londonderry Board of Guardians, the circular which is being sent to Boards of Guardians by the Countess of Aberdeen, on behalf of the Women's National Health Association, was received. It recommends a scheme for the provision of qualified midwives to attend maternity cases entitled to maternity benefit under the National Insurance Act. Dr. Thomas MacLaughlin, who presided, said he could not approve of the scheme, on account of the dual management proposed, the Women's Health Association having part control over the midwife. After some discussion, it was decided by a large majority to take no action in the matter. At several other meetings of Boards, such as Ballymena, Coleraine, and Clogher, similar resolutions have been passed. It is evident that the circular is meeting with a very cold reception in Ulster.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE ANTISEPTIC TREATMENT OF PHTHISIS.

To the Editor of The Medical Press and Circular.

Dear Sir,—In the letter you were so kind as to insert in the Medical Press and Circular, November 6th, there is a mistake in the printing which I beg to correct. The word "reports" in the sentence "for when the reports of the old Pharmacopœia were excluded from the recent editions" ought to have been "vapores," for the chief object of my letter was to direct attention to the scientific use of antiseptic vapours in the treatment of pulmonary phthisis. The simple fact that pure phenol enables us to carry out this principle deserves attention; for when a solution of pure water with 1 per cent. of phenol added is converted into vapour by boiling, we have an antiseptic agent of definite strength, which can be inhaled so easily and persistently that we have no difficulty in carrying out antiseptic principles in the treatment of lung diseases. It seems very doubtful whether sanatoria are likely to prove of any practical use, for the collecting of tubercular cases in any number in the same buildings or wards must rather tend to produce an atmosphere that is not a pure and healthy one, and is not consistent with open-air treatment.

I am, Sir, yours truly,
Robert Lee.

To the Editor of The Medical Press and Circular.

Sir,—In the interesting letter which Dr. Robert Lee contributes to your current issue he repeats a statement which, if my memory serves me rightly, he has more than once before put forth in your columns, namely, that "no antiseptic treatment (of phthisis) has been tried in a proper and scientific manner, and till it is we shall see no great change in the morbid effects of tuberculosis in this country." Dr. Lee does not believe in the administration of antiseptic remedies through the stomach; he alludes obviously to inhalation only. It would be very valuable if Dr. Lee would kindly explain exactly what he means by "a proper and scientific manner," and if he would indicate the therapeutical agents which he would recommend for trial. Can he name any agent which could be inhaled without injury or danger, whilst powerful enough to destroy tubercle bacilli, and to bring the septic spots or cavities in the lungs into a condition in which healing must follow. If he will be good enough to furnish the fundamental practical data necessary for a start I can assure him for myself and colleagues that we shall not lose an hour in putting the treatment to the test. It would be possible to carry out the method in every sanatorium; to provide inhalation chambers filled with an antiseptic atmosphere, in which the patients might remain for hours or days. The question of inhalation cannot have escaped the attention of anyone constantly engaged in the treatment of pulmonary tuberculosis, and we all know that so far it has not gained any recognition as a curative process. Even the quacks seem to have given it up in late years.

I am, Sir, yours truly,
Sanatorium Officer.

London, W., November 7th.

THE TURKISH DEBACLE, AND THE NATIONAL RESERVE.

To the Editor of The Medical Press and Circular.

Sir,—The fate of the National Reserve hangs in the balance. The next few months must decide whether it is to die out—a well-meaning but abortive attempt to keep in touch with the men in the country who have had a military training—or whether it is to be made so great a reality that the country will not allow the military authorities to neglect it, even if they wished to do so. The National Reserve now numbers about 170,000 men. It can be doubled—*i.e.*, brought up to 340,000 men—if all the counties in Britain do as well—and there is no reason why they should not do better—as London, Edinburgh and Surrey. But if it is doubled it is as certain as anything human can be that the Government will find the movement too big not to be taken seriously, and they will feel obliged to provide the men on the register with uniforms and rifles—absolute necessaries should a call ever be made upon their patriotism. Numbers alone will force the authorities out of their present attitude of benevolent indifference.

To be specific, I want to ask those of your readers who are eligible to send their names and addresses (stating distinctly the county or town in which they live), their ages, and the corps in which they served, to the *Spectator* Office, London. These replies shall be sorted out and sent to the Secretaries of the various Territorial Associations in whose area the men reside.

There are probably thousands of men who still do not know what the National Reserve is. May I explain by quoting the words of the first paragraph of the National Reserve Regulations:—

> "The National Reserve, which forms a part of the military organisation, is primarily a register of trained officers and soldiers who, being under no further obligation for military service, ... are organised under the auspices of County Associations, and encouraged by the military authorities with a view to increasing the military resources for national defence."

Every trained man and trained officer is eligible. Here is the form which I suggest your readers who are eligible should fill in and post:—

Form.

I desire to join the National Reserve.

Name in full ....
Address in full ....
....
Age ....
Former Corps ....
War Service (if any) ....

I am, Sir, yours truly,
J. St. Loe Strachey.

[The foregoing may appeal to medical men who have been in the regular or volunteer army service.—Ed. M.P. and C.]

OBITUARY.

MR. ARTHUR HENRY BENSON.

We regret to announce the death, which occurred on the 6th inst., of Mr. Arthur Henry Benson, the well-known Dublin ophthalmologist. A son of the late Prof. Charles Benson, M.D., Mr. Benson had a distinguished College career. In the year 1875 he graduated B.A. of Dublin University, and the following year took the degree of M.B. Ten years later the degree of M.A. was conferred upon him. In 1881 he became a Fellow of the Royal College of Surgeons in Ireland. Mr. Benson had been for many years one of the leading ophthalmic surgeons of Dublin. He was Surgeon to the Royal Victoria Eye and Ear Hospital, and Aural and Ophthalmic Surgeon to the Royal City of Dublin Hospital. He was a frequent contributor to the literature of his speciality, and many of his papers have appeared in our columns. He took particular interest in the proceedings of the Royal Academy of Medicine in Ireland, and was President of its Pathological Section in 1909-1911.

In private life he was a man of singular charm and modesty. He was interested in outdoor sports, and was a keen golfer and an experienced yachtsman. It was known for more than a year past that his health had broken down, but his friends hoped that with care and rest his life might have been prolonged. Unfortunately, these hopes have been disappointed.

We offer our sincere condolences to his widow, and to his brother, Sir Hawtrey Benson.

REVIEWS OF BOOKS.

THE DIFFUSION OF SMALL-POX. (*a*)

The writer of this booklet is also the author of the article on small-pox in both the first and second editions of Quain's "Dictionary of Medicine"; besides having produced "various papers, translations and reports on small-pox, on fever, and on small-pox hospitals in relation to public health." Such a record should surely go a long way towards constituting satisfactory testimony of the fitness of his preliminary training, and of the ardour with which he pursued his opportunities, as well as of the enthusiasm with which he endeavours to give the professional public the benefit of his collective experiences. Such contributions to the fund of general knowledge, emanating from the pen of a trained and earnest expert, are always worthy of the best attention of our readers. They form the best adjuvant to, and substitute for, immediate personal experience, which can in no instance be absolutely universal.

Our author's object in the preparation of this monograph is, as he himself tells us, to show that the hypothesis of "distal aerial dissemination is unsupported by the evidence, and that those who initiated and organised the small-pox and fever hospitals of London rendered an inestimable service, not only to London but to the world." A view of so very considerable interest to both the lay and the medical public should surely receive the most careful attention — more especially when defended, as in the present instance, by an expert of exceptional experience. We would express, in conclusion, the earnest hope that the collective researches of accomplished and enthusiastic investigators of the clinical nature and epidemic incidence of small-pox will in the near future come to be focussed so effectively on the great central question, which has hitherto successfully evaded solution as to lead to the discovery of the causative microbe of this deadly and still mysterious plague. It is rather strange, indeed, as well as disappointing, that the primordial germ of one of the diseases which presents most distinctively the leading features that would be theoretically regarded as characteristic of microbic infection has hitherto

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(*a*) "Small-Pox and Its Diffusion." By Alexander Collie, M.D.Aberd., M.R.C.P., etc. Bristol: John Wright and Sons, Ltd. 1912.

proved to be refractory to all known methods of investigation. Let us hope that it may prove one of the early conquests of our twentieth-century ultramicroscopic methods of research.

MEDICAL NEWS IN BRIEF.

Dental Hospital, Dublin.

THE annual meeting of the Incorporated Dental Hospital of Ireland was held last week, in the Hospital, Lincoln Place. The annual report stated that the new departure which marked the year ending September 30th last, was the generous grant of £150 to the Hospital by the Dublin Corporation. To extend the amount of purely gratuitous work for the city poor, which the grant made possible, it was decided to start a free dispensary, to be open on three evenings in the week. Though all means were taken to extend the knowledge of the dispensary among the poor, its advantages were so scantily availed of that, after an extended trial, the Board decided to discontinue it, and instead to make the morning dispensary free. In taking that step the Board had foregone a source of income which last year had brought in £90. It was believed that that must extend very largely the scope of the Hospital's benefits, and afford stronger grounds for appeal to the charitable public. The total number of cases treated in the hospital amounted to 47,212, of which 16,070 were dispensary cases, and 21,187 extractions under anæsthetics. The chief feature of the year's free work was over 600 fillings, nearly 1,000 advice cases, and 3,837 extractions. The balance sheet showed that while there was a satisfactory increase of £45 10s. in subscriptions and donations, the contributions had fallen £129. The report of the Dental School mentioned that the total number of pupils was 47, of whom eleven were exclusively engaged in prosthetic work, nine were combining the remainder of their prosthetic pupilage with their dental practice, three took short additional courses of prosthetic instruction, twenty were exclusively engaged in their dental hospital practice, and four took short additional courses of practical dental surgery. During the session the Dean of one of the largest London dental hospitals made a special inspection of the school and presented a report to the Department of Technical Instruction, for which he acted. He commented very favourably on the fittings and accommodation, the teaching, and the work of the students.

Dublin Clinical Hospitals and Instruction in Tuberculosis.

A DEPUTATION of medical men, representing all the general clinical hospitals of Dublin, waited on the Local Government Board last week with reference to the proposed teaching of tuberculosis treatment under the Insurance Act.

This teaching has been carried on at the Charles Street Dispensary by the staff, and the L. G. Board have signified the recognition and sanction of that course in view of the appointments throughout the country. Several of the members of the deputation, we are informed, held that the work which was being done by the Charles Street Dispensary should, more properly, be undertaken and carried out by the general hospitals. The reply of the Board to the arguments submitted will be furnished in due course.

The Mass Meeting of the Profession in Manchester.

MR. G. A. WRIGHT, F.R.C.S., presided at a mass meeting of medical practitioners in the Midland Hall, Manchester, on Saturday last, to consider the present situation created by Mr. Lloyd George's latest proposals.

Mr. E. B. Turner, F.R.C.S.Lond., proposed, and Dr. T. Wheeler Hart (Manchester) seconded, a resolution declaring that the conditions of service laid down in the regulations were intolerable, notwithstanding Mr. Lloyd George's new proposals, and would destroy for ever the independence of the profession. The resolution advised the refusal of any financial offer until the conditions of service were made compatible with the best interests and honourable position of the profession.

The resolution was suported by Dr. Reynolds (Manchester), Professor Murray (Manchester), Dr. Trotter (Huddersfield), and Dr. Mannix (Lancaster), and carried unanimously.

The second resolution, moved by Mr. F. H. Westmacott (Manchester), and seconded by Dr. C. E. M. Lowe (Crewe), was to the effect that members of the British Medical Association present should instruct their representatives to the Representative Meeting that any failure on the part of that meeting to give effect to the original demands of the profession would inevitably result in independent action being taken.

Other Meetings of the Profession.

AT a meeting of the City Division of the British Medical Association (which includes the City of London and the Boroughs of Finsbury, Bethnal Green, Shoreditch, Hackney, and Stoke Newington), held last week, attended by more than half the doctors practising in these areas, it was unanimously resolved to refuse to accept Mr. Lloyd George's terms and to decline to work the Act. The representatives appointed to attend the Representative Meeting next week were instructed in this sense. The doctors of the St. Pancras division, which includes St. Pancras, Islington, Holloway, and Highgate, have decided by 88 to 14 to refuse to work the Act.

At a representative meeting of medical men of Lincoln and a large part of Lincolnshire it was decided, almost unanimously, not to work under the Insurance Act unless the cardinal points as originally stated by the British Medical Association are conceded. The delegate of the division to the forthcoming special Representative Meeting was instructed to vote in accordance with this decision.

The Hampstead Division of the British Medical Association on Monday last resolved by 37 votes to six not to work the Insurance Act under present conditions; and instructed its representative to vote in accordance with this decision at the Representative Meeting. The meeting afterwards passed by a large majority a resolution declaring that to accept Mr. Lloyd George's offer would be "to undertake an inefficient service, to sell the freedom and to degrade the status of the profession."

At a meeting of the West Norfolk Division of the British Medical Association it was also unanimously resolved not to accept Mr. Lloyd George's terms.

Peamount Sanatorium—Malicious Injury Claim.

LAST week, before the Right Hon. the Recorder of Dublin, Messrs. Humphreys, Ltd., contractors, claimed from the Dublin County Council £800 in respect of the malicious destruction of the sanatorium at Peamount, near Dublin, on the 21st July last. Having heard evidence, the Recorder awarded £220.

University of Oxford.

IN a Congregation held on November 9th, the following degrees were conferred:—D.M.—A. H. Hogarth, Christ Church, and M. Davidson, Trinity.

University of Cambridge.

AT a Congregation held on November 9th the following degree was conferred:—M.B and B.C.—F. G. Chandler, Jesus.

The National University of Ireland.

THE following is the successful candidate for the Travelling Studentship (£200 a year tenable for two years).—In Medicine (Anatomy)—Henry L. Barnville, B.A., M.B., B.Ch., University College, Dublin.

SIR SHIRLEY F. MURPHY, F.R.C.S., has been appointed editor of *Public Health*, the official organ of the Society of Medical Officers of Health, in the place of Dr. G. F. McCleary, who relinquished the editorial control of the journal on his appointment as Principal Medical Officer to the National Insurance Commissioners.

NOTICES TO CORRESPONDENTS, &c.

☛ **Correspondents** requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Dr. E. A. (Beds).—The courtesy is usually extended to non-members of a medical society, but only to the extent of speaking in discussion or of examining cases, etc. Visitors cannot take part in voting or any other business proceedings

LEAGUE OF MERCY GRANTS TO HOSPITALS.

With the sanction of Prince Alexander of Teck, Grand President of the League of Mercy, grants for 1912, amounting in all to £2,315, have been made to extra-metropolitan hospitals in the league.

The total amount handed over to King Edward's Hospital Fund for London is now £170,000, in addition to which £12,076 has been given to extra-metropolitan hospitals in counties collecting for the league.

L. S. A. (Blackheath).—The so-called "hunger pain," as described by Moynihan, is most characteristic of duodenal ulcer, being frequently the first symptom. It is also definitely relieved by taking food.

Dr. R. R. (Liverpool).—Your communication came to hand as we were "at press."

APPENDICITIS AND AN UMBRELLA.

The conversation turned on surgery, a gentleman relating how a careless operator had stitched up a sponge in a wound. Another said it was not an uncommon occurrence, and a third offered his opinion that in the case of death under such circumstances the doctor should be found guilty of manslaughter. Then a little gentleman in the corner put down his paper and said, "I wish you wouldn't talk of such things, it upsets me dreadfully."

"How?" inquired the originator of the conversation.

"Well, three weeks ago I was operated on for appendicitis, and only this morning I heard that my doctor had lost his umbrella."—*Short Stories* for November.

Inquirer (Dundee).—The principal commercial source of thorium at the present day are the monazite sands deposits in Brazil. Purified monazite ought to contain not less than five per cent. of thorium oxide. The growing importance of this element for purposes of gas-lighting was stated the other day by Mr. Edmund White, B.Sc., F.I.C., to correspond to a demand for gas mantles to the extent of 400 millions annually.

Meetings of the Societies, Lectures, &c.

Wednesday, November 13th.

Hunterian Society (Westminster Hospital).—4 p.m.: Clinical Afternoon. Cases by Members of the Medical and Surgical Staff. Surgical Cases by Mr. W. G. Spencer, Mr. A. H. Tubby, Mr. E. R. Carling, Mr. J. M. G. Swainson and Dr. P. Stewart. A Demonstration of Clinical-Pathological Methods will be given by Dr. R. G. Hebb and Dr. J. A. Braxton Hicks.

United Services Medical Society (Royal Army Medical College, Grosvenor Road, S.W.).—5 p.m.: Col. B. Skinner, M.V.O., A.M.S.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan). 5.30 p.m.: Eye Operations (Mr. Brooks).

Brompton Hospital for Consumption.—4.30 p.m.: Dr. D. Grant: Special Post-Graduate Course.

Thursday, November 14th.

Royal Society (Burlington House, London, W.).—Papers by Dr. J. W. Cropper, Edith R. Saunders, Prof. A. J. Brown, Mr. F. P. Worley, Mr. R. Kirkpatrick, Mr. J. Thompson, Mr. G. W. Ellis, Mr. J. A. Gardner, Prof. R. B. Thomson and others.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel). 4.30 p.m.: Special Demonstration: Dr. G. P. Chappel: Selected Medical Cases.

Brompton Hospital for Consumption.—4.30 p.m.: Dr. M. Paterson: Special Post-Graduate Course.

Friday, November 15th

Royal Society of Medicine (Section of Otology) (1 Wimpole Street, W.).—5 p.m.: Cases and Specimens by Mr. Richard Lake, Mr. A. F. Penny, Mr. Ernest West, Mr. Hugh Jones, Dr. Dan McKenzie, Dr. H. J. Davis and others.

Royal Society of Medicine (Section of Electric-Therapeutics) (1 Wimpole Street, W.).—8.30 p.m.: Professor Jellinck (Vienna).

Child Study Society, London (Royal Sanitary Institute).—7.30 p.m. Mme. Pujol-Segalas (Paris).

Brompton Hospital for Consumption.—Expedition to Frimley, leaving Waterloo at 1.15 p.m. Demonstration at the Sanatorium by Dr. Wethered.

Appointments.

Cribb, H. G., M.R.C.S., L.R.C.P.Lond., Medical Superintendent at the Durham County Asylum.

Egan, John, L.R.C.P. and S.Irel., Senior Resident Medical Officer at the Guest Hospital, Dudley.

Laslett, William H., M.B., Ch.B.Vict., House Surgeon at the Maternity Hospital, Whitworth Street West, Manchester.

Pardoe, J. G., M.B., M.S.Aberd., Surgeon to the West London Hospital.

Purcell, N., M.B., Ch.B.Edin., House Surgeon at the Maternity Hospital, Whitworth Street West, Manchester.

Vacancies.

Staffordshire County Asylum, Stafford.—Assistant Medical Officer. Salary £160 per annum, with furnished apartments, board and washing. Applications to the Medical Superintendent.

Kent County Asylum, Maidstone.—Fourth Assistant Medical Officer. Salary £200 per annum, with furnished quarters, attendance, coals, gas, garden produce, milk, and washing. Applications to Medical Superintendent, Asylum, Maidstone.

Brighton, Hove and Preston Dispensary.—Resident Medical Officer. Salary £130 per annum, with board and residence. Applications to the Assistant Secretary, 113 Queen's Road, Brighton.

City and County of Newcastle-upon-Tyne.—Medical Officer of Health and Medical Superintendent of the City Hospitals for Infectious Diseases. Salary £700 per annum. Applications to Town Clerk, Town Hall, Newcastle-upon-Tyne.

Births.

Arkle.—On Nov. 9th, at Bentham, West Derby, Liverpool, the wife of A. S. Arkle, M.R.C.S., L.R.C.P., of a son.

Baker.—On Nov. 8th, at Freynes House, North Molton, the wife of F. C. J. Baker, M.R.C.S., of a daughter.

Broadbent.—On Nov. 7th, at 50 Brunswick Square, Brighton, the wife of Dr. Walter Broadbent, of a son (stillborn).

Greenwood.—On Nov. 6th, at "Reigate," Lower Park Road, Loughton, Essex, the wife of M. Greenwood, junr., M.R.C.S., Statistician to the Lister Institute of Preventive Medicine, of a son.

Grogono.—On Nov. 4th, at Witham Lodge, 171 Romford Road, Stratford, E., the wife of Dr. Eric W. Grogono, of a son.

Jones.—On Nov. 6th, at Cliffdene, Cowes, Isle of Wight, the wife of Fleet-Surgeon Murray Jones, R.N., of a daughter.

Meredith.—On Nov. 9th, at Haynes, Wellington, Somerset, the wife of R. W. Herbert Meredith, M.R.C.S., L.R.C.P., of a daughter.

Slade.—On Nov. 7th, at Chernocke House, Fleet, Hants, the wife of John Godfrey Slade, M.A., M.D., B.C.Cantab., etc., of a son.

Marriages.

Blaxland—Andrews.—On Nov. 6th, at Colney Church, A. Jasper Blaxland, M.S., F.R.C.S., of 2 Surrey Street, Norwich, son of Mr. and Mrs. Blaxland, of Bournemouth, to Marion, only daughter of the late Mr. W. Andrews, of Chediston, and of Mrs. Andrews, Colney.

Gilchrist—Marks.—On Nov. 7th, at St. Mary's, Primrose Hill, N.W., James C. Gilchrist, M.D., Cardiff, eldest son of the late Dr. Gilchrist, late of the Crichton Royal Institution, Dumfries, to Emmeline, younger daughter of the late Alfred Marks, Esq., formerly London manager of the London City and Midland Bank, Ltd., and Mrs. Marks, Adelaide Road, Hampstead.

Mackenzie—Burgoyne.—On Nov. 6th, at the British Consulate and the Guards' Chapel, Cairo, Major T. Campbell Mackenzie, D.S.O., R.A.M.C., Egyptian Army, to Elsie Burgoyne, only daughter of the late C. Moyle-Borlase, of Penzance, Cornwall, and Mrs. Borlase, of Aldborough, Norfolk.

Robinson—Daly.—On Sept. 30th, at Emmanuel Cathedral, Durban, Francis H. Robinson, B.A., M.B., B.C.(Cantab.), M.R.C.S., L.R.C.P., R.M.O., Bandolier Kop, Transvaal, elder son of Mr. and Mrs. H. Robinson, Spilsby, Lincolnshire, to Mary, elder daughter of Captain and Mrs. B. Daly, Belfast (late the Bedfordshire Regiment).

Deaths

Byrne.—On Nov. 5th, at Sunwick, East Molesey, and late of Manchester, George Byrne, M.R.C.S., L.R.C.P.Lond., husband of Florence A. Byrne, aged 56.

May.—On Nov. 4th, at Bountis Thorn, Finsbury Park, N., Jane, the wife of Lewis J. May, M.R.C.S.

Pott.—On Nov. 6th, at Yalding, very suddenly, Frank Pout, Brigade Surgeon, Army Medical Staff, aged 76.

Salt.—On Nov. 4th, at Inglewood, Malvern, Henry Salt, M.D., second son of the late John Salt, Esq., of London, aged 69 years.

Strong.—On Nov. 6th, at his residence, Sunnyside, Weston, Bath, Henry Barlow Strong, M.R.C.S., L.R.C.P., eldest son of the late Henry Strong, Barrister-at-Law, Middle Temple, in his 71st year.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, NOVEMBER 20, 1912. No. 21.

NOTES AND COMMENTS.

The Suffragist March.

WHATEVER our views of the extension of the parliamentary franchise to women, we must frankly admit that the movement has demonstrated the possession of qualities and resources with which the female sex has not generally been credited. A fine field, for instance, has been opened up in journalism, in public speaking, and in organisation, and there has been no lack of women capable of rising to the opportunity thus afforded. Of certain other physical demonstrations there is no need here to make anything more than a passing allusion. The most recent feat is the march of a small band of suffragists, led by Mrs. Fonblanque, from Edinburgh to London, a distance of 393 miles. We understand that none of the party was obliged to fall out on the march, and that from ten to thirty miles was accomplished on each day's walk. The feat is certainly one that arrests attention. It opens up a new phase of the physical resources of women, although one, of course, calls to mind the romance of Jeannie Deans, who made a similar journey on foot to petition the King for her sister's pardon. Henceforth we may expect women to invade every field of athletic sport, for nothing of the kind can be closed against a competitor who can walk from Edinburgh to London within a reasonably short time.

The Dress of the Walkers.

THERE is much to be proud of in their performance, for the women who are equal to it should be fit mothers of a race noted for strength and endurance. Writing for medical readers we may perhaps be pardoned for calling attention to another side of the matter—namely, that of feminine dress. It may reasonably be assumed that high-heeled shoes were not popular in this long-distance march; neither were tight corsets, small waists, and loose, long skirts much in evidence. If the suffragists can lead the fashion in feminine dress so as to shear away some of its monstrosities the world at large would probably be more ready to put up with any little foibles in other directions. The large hat is still with us, but the hobble skirt appears to have gone the way of all of women's extreme fashions. One gew-gaw we have noted lately is particularly grotesque—namely, the long feather fixed at a right angle from the side of the hat. Any woman carrying such a decoration takes up exactly twice the room to which she is entitled, and becomes a general nuisance in street, church, railway carriage or other place of public resort. Let us hope that the suffragists' example will influence feminine fashions in time to prevent the necessity of passing sumptuary laws by a man's parliament.

Food and the Sanatorium Benefit.

WE are glad to note that after considerable pressure brought to bear on the Irish Insurance Commissioners, they have been persuaded to agree that insurance committees are entitled to provide food and clothing in the administration of the sanatorium benefit. In other words, the Commissioners have assented to the view that the word "treatment" includes these necessaries. We understand that the English Insurance Commissioners are taking the same view. It was obvious enough that if any good was to be done by domiciliary treatment in tuberculous cases, instances would arise where the first essential of treatment would be food. But it is not always easy to get Government officials to see the obvious. Much credit is due to the insurance committees, notably those of the city and county of Dublin, for the pertinacity with which they have pressed their point in face of the opposition both of the Insurance Commissioners and of the Local Government Board.

Sparing the Rod.

AT first sight it would seem as if the fear of inflicting too much punishment upon the growing child had caused the pendulum to swing in the opposite direction, leading a certain section of the teaching profession to refrain from correcting or reproving their wayward scholars in the slightest degree. The reign of terror that once prevailed in young people's "seminaries," as depicted so graphically by Charles Dickens, is, happily, a thing of the past. Corporal punishment is now comparatively seldom administered, and in public elementary schools, at any rate, teachers have to be content with the lightest caning, or they run a serious risk of an action for assault upon the part of irate parents. To such an extent has the policy of sparing the rod arrived that a system of education has actually arisen the central feature of which, so far as we understand it, consists of a new type of discipline, based on self-control, and voluntarily imposed by the children upon themselves. At the joint conference of the Child Study Society of London and the Montessori Society of the United Kingdom, held last week at the Royal Sanitary Institute, the principle of the Montessori system was explained. The inventor of this remarkable method of education, Dr. Montessori, the first Italian lady physician, claimed that discipline is secured by enfranchising liberty, and not by punishment or rewards. The results of the teaching, according to its exponents, are said to be of great value in enabling young children speedily to acquire control of all voluntary movements, including those necessary for the "three R's." It remains to be seen whether this new system will spread in this country as it appears to have done in the land of its birth.

The Cholera in Turkey.

A CROWNING disaster has fallen upon the Turks in their fight against the Balkan States, in the shape of an outbreak of cholera. Large numbers of persons are attacked daily, and the death roll has been and is likely to continue enormous under the present conditions of widespread famine and of the depression of defeat. In Constantinople itself there can be no hope of feeding the healthy refugees, still less of nursing the sick. The outlook for the city, indeed, is at present one of the blackest that the human mind could contemplate. The curtain seems likely to go down ere long upon a scene of horror unparalleled in the history of the world. For a backward country like Turkey cholera is always more or less in the air. During the Crimean war the allies suffered heavy losses from that disease. The wide area covered by the present epidemic suggests that the water supplies are extremely contaminated. Under these circumstances it may be a wise policy for the Bulgarians to halt at the lines of Chatalja, for if they go on to Constantinople they are walking into the jaws of a remorseless enemy. Brave men are not proof against cholera, and if the victorious Bulgarians bivouac in Constantinople they are likely to lose more men from the onslaught of the cholera vibrio than they have lost in all their dearly-bought victories. Far better they should stop at Chatalja and boil their drinking water.

LEADING ARTICLES.

THE INSURANCE ACT AND THE MEDICAL PROFESSION.

DURING the past week the dispute between the Government and the medical profession has developed into a situation which leaves little or no hope of a compromise. Meetings of the local divisions of the British Medical Association have met throughout the Kingdom and have given their answer to the latest proposals advanced by Mr. Lloyd George. In the overwhelming majority of cases the instruction to the local Representative and the Representative Council has been definitely to reject these proposals and to refuse to work the Act as it stands. In other words, medical men stand to the cardinal points laid down at an early stage of the dispute. These local declarations must, of course, pass through the hands of the Representative Council and receive their approving resolution before they assume the status of a declared policy. To all intents and purposes, however, it is to be presumed that the Council in this matter will simply act as a body for registering the decision of its constituents. With little hesitation, therefore, we may conclude that the Insurance Act has been rejected by the medical profession. At the same time it seems clear that a considerable body of opinion exists in the Divisions in favour of an attempt to secure more favourable terms. Should the Council decide to undertake negotiation with that end in view, the utmost it can do to secure the consent of its electorate—so we gather from the *British Medical Journal* of the 16th November—is by a referendum to divisions. It is to be regretted that some more elastic machinery is not available under the constitution of the Association. The Representative Council held its momentous meeting at the Connaught Rooms on the 19th and 20th instant, under the chairmanship of Mr. Verrall. It is difficult to imagine the state of affairs which will ensue in the event of the rejection of terms and conditions as to medical service under the Act. The situation is unparalleled, and so far as can be reasonably anticipated the balance of advantage should be in the hands of the medical profession, provided they can secure the adhesion of an overwhelming majority of their members. However, no great collective movement has ever yet been brought to a successful issue into which the chances of disloyal secession have not entered. Judging from the signs and portents that are overshadowing the professional horizon, the Christmastide of 1912 is likely to become memorable in the medical annals of the United Kingdom. Although the immediate administration of the Act would fall to one class of practitioners, yet all ranks must be indirectly concerned. Mr. Lloyd George does not appear to have made any serious attempt to grapple with the serious aspects of the relationship between the voluntary medical charities and the insured. Hospital consultants and specialists, as well as salaried medical officers, have practically with one voice declared they will not attend insured persons gratuitously at the hospitals. In rather over a month the medical benefits of the Act will come into force, but even at this late hour no terms have been made with the profession that must administer those benefits. The procrastination which has marked this controversy is not as a rule characteristic of the methods of Mr. Lloyd George. The delay suggests, as it has often done before, that he may be provided with some alternatives with the help of which he hopes to checkmate his opponents Whatever may be the outcome, we sincerely hope that he will not succeed in splitting that unity of the medical profession which is the one consoling feature in the present crisis. Within the next few weeks or months events will probably put to the test the individual loyalty of the majority of the medical men in the United Kingdom.

CURRENT TOPICS.

The London School of Tropical Medicine.

THE members of the City Sub-Committee for the Rubber Trade have recently issued an appeal on behalf of the Lord Mayor's Fund, formed with the object of raising a sum of £100,000 for the endowment and extension of the London School of Tropical Medicine. The circular, which urges the claims of the school on all those interested in the production, manufacture, and sale of rubber, says: "All who are connected in any way with a tropical cultivation such as rubber—whether directly, as planters and suppliers of their machinery and tools, or indirectly, as manufacturers relying on the tropics for their raw material—realise that the most important consideration is the health of the men, both Europeans and natives, engaged on the plantations. No one can view with indifference the enormous annual wastage of human life, due to the ravages of tropical diseases, and all connected with plantation rubber must recognise the duty of doing everything possible to improve the health conditions, but we desire to emphasise the fact that this appeal is made on business as well as on humanitarian grounds. The London School of Tropical Medicine was founded with the object of carrying on research into the causes, prevention, and treatment of tropical diseases, as well as to give a thorough training to medical men to enable them to deal, in the tropics or elsewhere, with all forms of tropical disease. Support to this appeal has already been received from various companies engaged in rubber cultivation, and, so far, out of the £100,000 required, approximately £44,000 has been collected; but even the whole £100,000 is a small amount to ask for when the enormous benefits to be derived from improved health are taken into consideration." Considering the enormous demand for rubber, it should not be difficult to raise the required sum in a reasonable time.

Ozone for Public Buildings.

The adequate ventilation of public buildings still forms one of the most pressing problems of the day. The apparent indifference, amounting sometimes to positive neglect, on the part of those responsible for the airing of covered-in places where masses of people congregate periodically, is a matter for the gravest reflection. Churches and theatres alike suffer, some more than others, from lack of means of replenishing, let alone of even heating, the atmosphere within their walls, the respiration of which often leads to a characteristic train of symptoms which are sometimes erroneously ascribed to anything but the true cause. Natural ventilation is seldom sufficient to render the air of a large building free from any suggestion of stuffiness, and the provision of artificial or forced systems of atmospheric interchange is a costly undertaking. A considerable degree of success has been obtained by the introduction of a system whereby currents of ozone are dispersed throughout the air of a closed space. The public have already made its acquaintance on one of the Tube railways, and the general consensus of opinion is that the travelling along that particular line has been thereby rendered much more agreeable. It should not be impossible to install ozonising plants in all large buildings which, if not directly assisting in the removal of foul air, would, at any rate, impart a freshness to the atmosphere and go far towards the prevention of somnolence and headache.

Business Men and Health.

Some little stir has been caused as the result of the opinions expressed by certain leaders of the medical profession upon the health of city men at the recent conference upon the subject at the Guildhall. The casual reader of the speeches made thereat might be excused were he to believe that sound health is entirely a matter of diet. An adequate supply of wholesome and nourishing food is, of course, a *sine quâ non* for the maintenance of physical and mental vigour, but it would be a mistake to think that a due observance of dietetic laws constitutes the whole of hygienic law. Faddism in diet is greatly to be deplored, except when it is compulsorily indulged in by the chronic dyspeptic. The neurasthenic and the hypochondriac also are not lifted out of their respective mental grooves by a daily—or, rather, an hourly—solicitude as to what they shall eat and what they shall drink. Every man of discretion ought to know by experience what suits his digestion and what he ought to avoid, and it is of little use to lay down any universal law as to eating, seeing that, in matters of diet, most people are a law unto themselves. The value of fresh air, of regular habits, and of sufficient exercise, as well as of recreation, needs to be impressed quite as much upon city workers as that of proper food. It would be well in conferences of this character to invite prominent laymen to express their views upon the subject, as was done not long ago in connection with a discussion on tropical medicine. Restaurant and tea-shop proprietors might also, with advantage, participate in meetings at which opinions upon matters affecting the health of a large number of their clients are ventilated.

Automatism.

A prisoner of good social position and of good character was tried at the late Derby Assizes and sentenced to two months' imprisonment for the theft of a motor car. There seemed no adequate motive for the theft. The case is remarkable only for the novelty of the defence that was raised. This was based on the theory, which it was urged had been scientifically established, that in certain cases of unstable nervous equilibrium an individual passes from one personality to another without either the power to prevent this transition or the knowledge in the primary state of what was done in the secondary. Dr. Hyslop, called as an expert, described the prisoner's condition from the time of his arrest to the time of the trial as one of mental automatism, which was midway between somnambulism and a minor form of epilepsy. A person so affected, he maintained, could perform complicated mental and physical actions of which he would have no recollection on recovering his normal state. Previous to this testimony the prisoner had declared on oath that he had no recollection of what had happened between leaving his Territorial camp and being in the police cell, a month later. The judge brushed aside this defence, ruling that the question was whether the prisoner knew he was doing wrong when he stole the car, not whether he remembered it some time afterwards.

London Ambulance Service.

In view of the increasing number of accidents from the motor traffic alone, an efficient ambulance service is one of the most pressing needs of the day in London; and it is with regret we learn that this cannot be supplied until the County Council shall have obtained from Parliament power to co-ordinate the existing material. This may involve a delay of many months, since the matter cannot be brought forward until next Session. Adopting the conclusions of a Sub-Committee, the Council agrees that there does actually exist at the present time in London material which, with efficient organisation, would furnish an adequate service. The Local Government Board, however, has declared that, while they approve of the principle of a united ambulance service they have no power to authorise the utilisation of the ambulances provided by the Asylums Board, the Port of London Authority, the borough councils, or the boards of guardians, and that legislation will be necessary. With regard to existing and available material we learn that the Metropolitan Police maintain 336 ambulances for use in street accidents. The Port of London Authority is effecting great improvements in its ambulance facilities, and when complete the service will consist of four motor ambulances, 41 litters and litter undercarriages, 43 stretchers, and 38 awnings. The Asylums Board possess eight ambulance stations, 62 horse-drawn ambulances, 17 petrol-driven ambulances, and 11 petrol-driven omnibuses capable of adaptation for use as ambulances. Ambulance services besides these are kept up by the principal hospitals, the borough councils, the Asylums Board and boards of guardians; altogether a small army, which needs to make it perfect only a responsible commander-in-chief and a staff to carry out his orders.

The Food Value of Margarine.

Substitutes for staple articles of food, however excellent in themselves, are seldom accepted by the public as the real equivalent for that to which they have been accustomed all their lives. No matter what the chemical composition or nutritive properties of an alternative food-product, its introduction into the domestic larder is apt to be resented in an extraordinary degree. This prejudice is well illustrated in the case of magarine, the well-known substitute for butter. This substance, first prepared in France, in 1870, by its inventor, has practically the same food-value as ordinary butter, with the exception that in the former there is a less percentage of soluble and volatile fatty acids. An amusing discussion as to the relative values of the two substances took place last week at a meeting of the Central (Unemployed) Body for London, owing to the recommendation of the Finance Committee to supply the Hollesley Bay Colony with magarine, at a cost of £96, instead of with butter, at a cost of £228. Some of the members were at once up in arms with indignation at such a proposition, in spite of the fact that the Mayor of Islington, himself a caterer, offered to give five pounds to any charity if those present could discover which of four pats he prepared were margarine and which butter! Fortunately for the exchequer the amendment to substitute margarine was carried by 22 votes to 11. It would be a great pity if an unfounded prejudice were to prevent the more extended use of a wholesome and inexpensive fat in the daily dietary of the poor. The action of the committee may, therefore, be commended as tending to educate popular opinion and to remove a common misconception as to the food-value of margarine.

The Efficacy of Sulphur Lotion.

Medical practitioners who have occasion to prescribe sulphur for external use have often been surprised on account of the variable results obtained with this drug in the form of a lotion. Even with the same formula the active ingredient will seem more energetic at one time than at another. The discrepancy is probably explained by the varying degrees of solubility of the sulphur, by the extent to which it is incorporated with other drugs, and by the degree of acidity of the cutaneous secretions with which it comes into contact. The subject has been ably dealt with by Dr. O. H. Foerster, of Milwaukee (*a*), who points out that ordinary sulphur does not interchange with the keratin of the horny layer of the skin, both being insoluble. The views of Unna are quoted to the effect that the therapeutic efficiency of sulphur lotions must depend upon their ability to exhibit sulphur to the skin in such a form that either nascent sulphur or sulphuretted hydrogen, or both, are evolved. Mixtures of lime-water and sulphur, as commonly ordered, do not fulfil this requirement, there being practically no interaction, so that such lotions often give disappointing results when employed in acne or furunculosis. The author concludes that Vleminck's solution, or liquor calcis sulphurata, prepared by boiling together milk of lime and sulphur, is the most active of all sulphur lotions, because, on coming into contact with the skin, the reaction of which is acid, nascent sulphur in a state of fine subdivision is formed in addition to hydrogen sulphide.

The Favoured First-born.

Our official belief in the superiority of the first-born is very ancient. Hindu and Hebrew have supported primogeniture from immemorial antiquity, and the feudal system has planted the idea firmly in such legal code as we possess. "Do to others as they would do unto you, but do it first," is a comparatively modern business axiom; it has the sanction of centuries behind it when applied to the art of getting born. The importance of being born first is nowadays often questioned, probably because only one can be the first-born, and there is an overwhelming majority of those who are not so lucky. Although we may suspect the scepticism of the younger son, he has scientific backers. Professor Karl Pearson shows that tuberculosis, insanity and criminality have all a preference for the eldest, and he is supported by other reputable observers. Doubtless the degenerative changes attributed to the peerage are due to this phenomenon. Some of these degenerative traits may be due to environment. The tendency to coddle and pet the only child may give it a vulnerability to disease from which the later additions to the family are free. The first child is an event, the others only incidents, and they are treated accordingly. Parental immaturity is obviously more marked in the production of the heir than of the rest. This may help to show that the first-born, at any rate, does not labour under all the advantages that tradition and law have assigned to him. Let those of us who are younger sons take heart. Our day is coming.

Sex and Smell.

We all know in a vague sort of way that the senses of sex and smell are related. The bare fact is realised in any work of physiology, but no more. What the connection is we do not know. Kraft-Ebing in his masterly and unpleasant work, *Psychopathia Sexualis*, recognises this very definitely, and gives detailed examples of the incidence of the obvious connection, but beyond this we are in the dark. The genital caproic secretions are coupled in physiological works in olfactory parallel with cheese, an article of diet taboo to the adolescent in France on the plea that it "gives one ideas." Koblanch and Roeder, in Germany, have removed the olfactory organs in immature female animals. When the severity of the operation did not disturb the course of the experiment it was found that turbinate loss arrested in a marked degree the development of ovaries, uterus and vagina, especially the horns of the uterus. Sexual desire was also diminished. These are additions to well-known facts, but we must still wait for the mechanism of the relation to be established. Work on this class of observation is not only likely to be of practical value in educative psychology but it may establish some very interesting details of our racial history.

(*a*) *Journal of Cutaneous Diseases*, November, 1911.

Trading Laboratories.

Up to quite recently it was assumed that clinical pathology was a branch of medicine, and that the work of the clinical pathologist was part of the profession of medicine. The various clinical laboratories were managed and the reports given by medical men. That this is the only safe course we have not the slightest doubt. It is with considerable alarm, therefore, that we observe that certain manufacturing chemists, and other trading firms, are opening what are described as "research laboratories" for the purpose of examining pathological specimens for medical practitioners, and, in at least one instance, for pharmacists. In some cases these laboratories are advertised as being under the charge of medical men, whose names are given. It is a question, by the way, whether such gentlemen are not guilty of unprofessional conduct. In other cases no guarantee of any sort is given, and we are left to guess at the qualifications of those who make the examinations. Judging from the exiguity of the fees asked—in one case 1s. for report on a diphtheria swab—we are safe in assuming that competent medical men are not employed. It must be borne in mind that a report on a pathological specimen is not a statement of fact, but of opinion, and its only value depends on the skill, knowledge and experience of him who gives the opinion. Viewed in this light the fee of one shilling quoted above is probably exorbitant. The whole subject of clinical laboratories is one that deserves the earnest attention of the profession.

Elsewhere in our columns (p. 551) will be found a special report of the Council meeting of the Royal College of Surgeons of England, held on November 14th. Notice was given of three resolutions to be moved at the annual meeting of Fellows and Members on the 21st instant, one endorsing the action of the College with regard to the Insurance Act; the second claiming the right of members to direct representation on the Council; and the third regretting that a special joint meeting had not been called to consider the Act. An important letter was reported by the President, Sir Rickman J. Godlee, addressed by him to the Insurance Commissioners with regard to the position of resident medical officers under the Insurance Act.

PERSONAL.

H. M. The King has approved of the award, in the gift of the Sovereign and recommended by the President and Council of the Royal Society, of a Royal Medal to Professor Grafton Elliot Smith, F.R.S., for his researches on the comparative anatomy of the brain.

Dr. W. Llew. Davies, of Abernant, has been elected Mayor of Llanidloes, Montgomeryshire.

Dr. A. E. Boycott, M.D., Ch.B.Oxon., has been appointed to the Chair of Pathology in the University of Manchester.

Dr. Mabel E. Gates, M.D., B.S.Lond., has been appointed a member of the honorary staff of the Exeter Dispensary.

Dr. J. W. Cropper read an interesting paper last week before the Royal Society on "The Development of a Parasite of Earthworms."

Dr. W. K. Walls, M.B.Lond., has been appointed Lecturer in Clinical Obstetrics and Gynæcology in the University of Manchester.

Mr. C. Banting, M.D., B.S., F.R.C.S., has been appointed Assistant to the Ear and Throat Department at University College Hospital.

Dr. William Dickson, D.P.H., Assistant Medical Officer for the County of Fife, has been appointed Tuberculosis Officer for the same county.

Dr. Edward Woakes, M.D., laryngologist, who died on September 30th, aged 75, left estate valued at £31,157 gross, with net personalty £25,874.

Sir Donald MacAlister, K.C.B., M.D., will preside at the forthcoming Session of the General Medical Council on Tuesday, November 26th, at 2 p.m.

Dr. A. F. Bernard Shaw, M.B.Dub., D.P.H., has been appointed Assistant Medical Officer of Health and Assistant School Medical Officer to the City and Port of Cardiff.

Dr. Frederick R. Walters, of Farnham, and Dr. F. W. Wandley Griffin, of Fulham, have been appointed chief tuberculosis officers to the Surrey County Council.

Dr. George Calderwood, who has been Medical Officer of Health for the Egremont Urban District Council for nearly thirty years, has announced his intention of resigning that post at the end of the current year.

Mr. William Thorburn, F.R.C.S., has been appointed Medical Referee under the Workmen's Compensation Act, 1906, for County Court Circuit No. 5, and to be attached more particularly to Oldham County Court.

Dr. Pollard, Medical Officer of the Blackburn Union, was the recipient the other day of a handsome gift of plate from the staff of the workhouse as a token of the high esteem in which he has been held during his service of over twenty-four years as medical officer.

Lieut.-Colonel W. W. O. Beveridge, D.S.O., R.A.M.C., has been selected for appointment as Professor of Military Hygiene at the Royal Army Medical College, Millbank, S.W., in succession to Brevet-Colonel C. H. Melville, whose tenure of the appointment has expired.

The testimonial of the Royal Humane Society has been presented to Dr. Cornelius C. Hickey for saving the life of a boy who was in danger of drowning near Kilkee last July. Dr. Hickey had to plunge into the sea fully dressed and swim a considerable distance before getting the boy safe ashore.

Dr. G. F. Buchan, Medical Officer of Health for Heston and Isleworth, was the recipient the other day of a presentation from the members of the district Local Government Officers' Association upon his resigning his post to take up a similar office under the Willesden Urban District Council.

The President (Sir Francis Champneys, Bart., M.D.) and the Council and Fellows of the Royal Society of Medicine will be at home to members of the profession at the new house of the society, 1, Wimpole Street, W., on November 27th, 28th, 29th, and 30th, at 8.30 p.m. There will be music and epidiascope and cinematograph demonstrations, and smoking will be allowed.

We are informed that the Carmichael Prize for the best essay on "The State of the Medical Profession in Great Britain and Ireland" has been awarded by the Council of the Royal College of Surgeons of Ireland to Mr. H. Nelson Hardy, F.R.C.S.Edin., of London.

ORIGINAL PAPERS.

THE NEUROLOGY OF THE VISUAL SYSTEM.

A Short series of Original Papers.

By HARRY CAMPBELL, M.D., F.R.C.P.,

Physician to the West End Hospital for Diseases of the Nervous System.

PAPER I.

THE visual system has to be considered under two aspects—the psychic and the motor. The former embraces those nervous processes which, beginning in the retina and ending in the cortex, issue in psychic visual phenomena; the latter embraces all the muscular activities pertaining to vision, those, namely, involving the intrinsic, the extrinsic and the protective muscles of the globes.

THE SENSORY VISUAL SYSTEM.

Anatomical Résumé.—The retina consists of three layers of neurons: (*a*) rods and cones, (*b*) bipolar cells, and (*c*) cells whose fine non-medullated axons constitute the optic nerve fibres. (Fig. 1.)

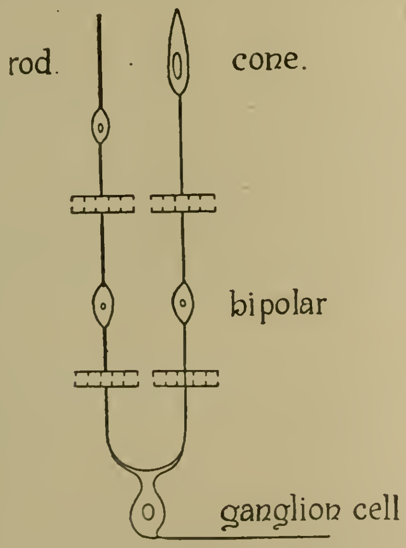

FIG. 1.—Diagram of retina representing the three chief layers of cells. The nerve-impulses started by the impact of light originate in the rod and cone layer. (The cones contract under the influence of light.) The bipolar cells are by most thought to be the analogues of the periphery sensory neurons (photo neurons).

It is estimated that each optic nerve contains nearly a million fibres—*i.e.*, more than the total number of afferent fibres entering one side of the spinal cord. It is the fineness of the optic fibres (due to the tenuity of their axis-cylinders and their lack of any medullary sheath) which renders this large number possible.

The meninges of the brain are continued on to the optic nerves, the sub-dural and sub-arachnoid spaces of the brain being continuous with corresponding spaces around these nerves. (Fig. 2.) The following description of the course of the visuo-sensory tract will be facilitated by a study of Figures 3, 4, 5, 6 and 7.

The fibres from the nasal half of each retina, and those from the macular region (which form a separate set) decussate in the optic chiasma. The macular fibres appear to maintain a central position, alike in the optic nerves, the chiasma, and the optic tracts.

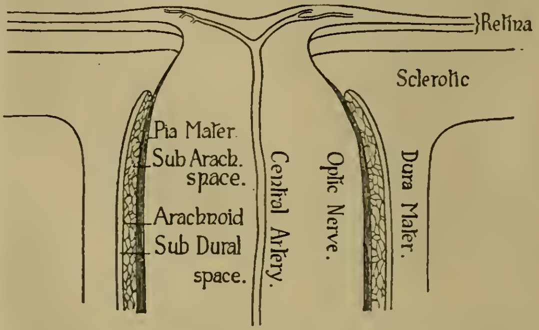

FIG. 2.—Diagram showing the meningeal investments of the optic nerve. These are the same as, and indeed a direct continuation of, those of the brain. Hence the sub-dural and subarachnoid spaces of the brain are continued around the optic nerve up to its entrance into the sclerotic ring.

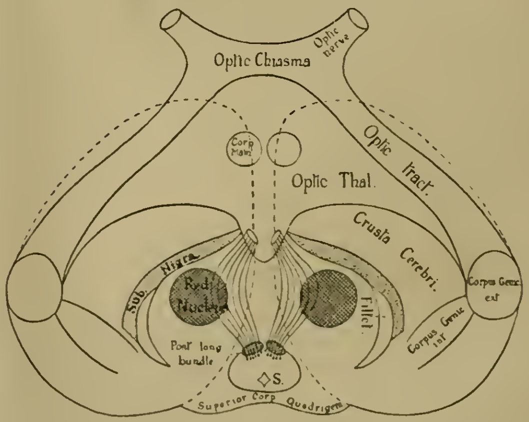

FIG. 3.—This diagram serves as a key to the central part of Fig. 4. It represents a horizontal section, taken through the uppermost part of the brain-stem. [The anterior portions of the optic thalamus lies higher, and the anterior portions of the optic tracts and the chiasma lie lower, than as here represented.] S = aqueduct of Sylvius; anterior to this the roots of the third nerves can be seen arising from their nuclei and passing forwards—many of them traversing the corresponding red nucleus—to issue between the two crura at the base of the brain.

From the chiasma the optic fibres pass into the optic tracts, terminating mostly in the corresponding external geniculate body, though a small number end in the corresponding pulvinar (Degeneration of the pulvinar alone does no cause hemianopia.) From these centres spring a further series of visual neurons, the axons of which pass through the retro-lenticular part of the internal capsule and the "optic radiations" to the visual cortex. The cortical termination of the pulvinar fibres is not known. The external geniculate fibres terminate as follows: Those pertaining to the macular area of each retina appear to have extensive relations with the visual cortex of both hemispheres, passing mainly to the region of the angular gyrus (*i.e.*, the convolution bordering the posterior extremity of the superior temporal sulcus), while the non-macular fibres pass to the hemiopic region bounding the calcarine fissure, which separates the cuneus above from the lingual lobe below.

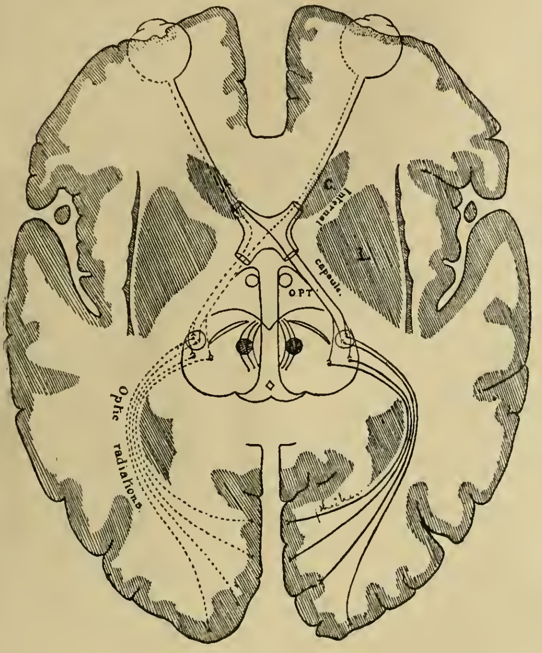

Fig. 4.—Horizontal Section through brain (schematic) showing the visuo-sensory tract. The optic nerves and globes are represented as seen through a transparent brain. Fig. 3 gives the key to the central part of this figure. C=Caudate nucleus, L the lenticular nucleus. The dotted tract on the left starts in the left half of each retina, and terminates in the left hemiopic centre in the posterior part of the brain. The retinal fibres, after traversing the optic tract, are seen to terminate in the corpus geniculatum externum and the pulvinar. Here a further series of neurons originate, their axons passing through the retro-lenticular portion of the internal capsule and the optic radiations.

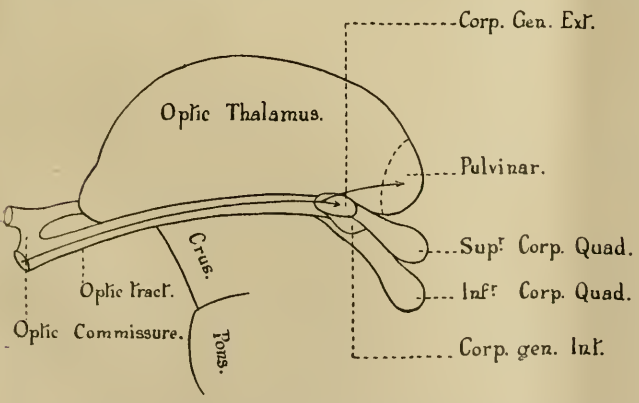

Fig. 5.—This diagram serves as a key for the central part of Fig. 6. It shows a visual fibre in the optic tract sending a terminal twig to the corpus geniculatum externum and to the pulvinar.

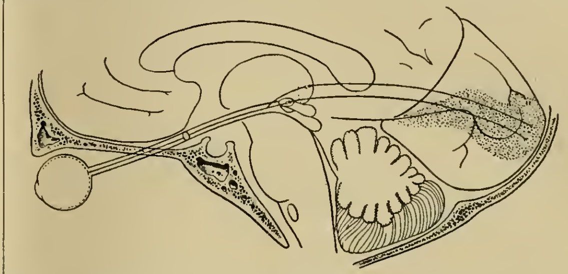

Fig. 6.—This figure shows a retinal visual fibre coursing along the optic nerve and optic tract, and terminating in the corpus geniculatum externum and the pulvinar. Thence a fresh series of neurons are seen passing backwards to terminate in the peri-calcarine hemiopic area (area striata). The junction of the two series is not clearly shown.

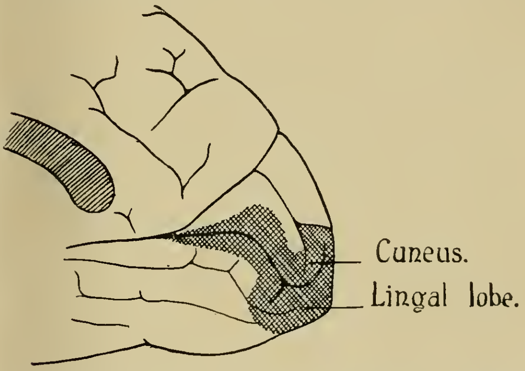

Fig. 7.—Inner aspect of posterior portion of right hemisphere showing the "visuo-sensory area" about the calcarine fissure. It occupies the sides and extends into the depth of the fissure. Anteriorly it occupies the lower lip only.

The hemiopic peri-calcarine area receives fibres belonging to the corresponding lateral half of each retina. Those belonging to the upper half of the corresponding lateral half of the retina pass to the cuneate lobe above the calcarine fissure; those pertaining to the lower half of the corresponding lateral half of the retina pass to the lingual gyrus below the calcarine fissure.

The peri-calcarine hemiopic area can be distinguished from the rest of the cortex by the presence of the well-marked white line of Gennari (=thick granular layer containing a dense plexus of medullated fibres), which is the analogue of the outer line of Baillarger in other parts of the cortex.

This *area striata*, of which the most characteristic microscopic elements are large stellate pyramids (in the fourth layer), is confined to the sides of the calcarine fissure which it bounds everywhere, except anteriorly, being there limited to the lower lip. Bolton terms the striated hemiopic area the visuo-sensory area, and the circumjacent visual area in the occipital cortex (devoid alike of the line of Gennari and of stellate pyramids) he terms the visuo-psychic area. It would be more accurate to distinguish the two as the primary and secondary visuo-cortical areas, since the term " psychic " is as applicable to the one as to the other.

The hemiopic centres of the two sides are united by means of large medullated fibres which pass through the posterior part (splenium) of the corpus callosum. They occupy the inner side of the optic radiations.

As to its philogenesis, the visual cortex is first met with in the higher fishes, in which fibres can be traced from the corpus geniculatum externum to the posterior part of the cerebrum. In those fishes which have no cortex cerebri, the optic lobes (which correspond to the superior colliculi) represent the highest visual centres. In the monkeys the posterior visual part of the brain is cut off from the rest by the parieto-occipital fissure (Affenspalte) and forms a distinct occipital lobe. In the anthropoid apes and in the lower races of man much of the visual area is seen on the external cerebral surface. In the higher races, most of it is pushed round to the mesial surface.

Besides the fine visual fibres in the optic nerves, chiasma, and tracts, other and thicker fibres are met with. These subserve the light reflex of the iris, and therefore do not come in for consideration here. They behave, as regards decussation in the chiasma, like the visual fibres, terminating, however, not in the pulvinars and external geniculate bodies, but in the superior colliculi, or, as some think, in the third nerve nuclei.

The optic nerves, chiasma, and tracts also contain efferent fibres, the function of which is doubtful.

Mention should here be made of Gudden's Commissure. This consists of fibres uniting the two external geniculate bodies through the optic tracts (by their mesial roots) and the posterior part of the optic chiasma.

The decussation of the optic nerve fibres from the standpoint of comparative anatomy.—The behaviour of the optic fibres, as regards decussation in the chiasma, has a significance on which comparative anatomy sheds some light. In fishes and birds all the fibres of the optic nerves decussate, and in them destruction of the posterior part of one cerebral hemisphere causes blindness of the opposite eye. In fishes these nerves cross separately; in birds they unite, at their crossing, into a chiasma. In both classes the eyes are placed at the sides of the head, with the results that: (*a*) Each eye images objects on the corresponding side of the sagittal plane only, the two visual fields meeting at this plane (vision is, *i.e.*, periscopic); hence, one side of the brain perceives objects on the opposite side of the sagittal plane only. (*b*) Each visual field extends considerably backwards (vision is, *i.e.*, panoramic).

As the animal scale is ascended, the eyes gradually shift forwards and two effects follow: (*a*) The visual field of each eye comes to extend beyond the sagittal plane, causing an overlapping of the two fields, so that objects falling within the overlapping portions are seen by both eyes; *i.e.*, vision is in respect of them binocular. The more forward the eyes come to be situated, the wider does the range of binocular vision become, and it increases with every increment in the power of convergence. (*b*) With the increase in binocular vision there is a corresponding diminution in panoramic vision.

Observe that the overlapping portions of the two fields are seen by some part (less or greater according to the degree of overlapping) of the temporal half of each retina. This " seeing " part of the temporal retina images objects on the opposite side of the sagittal plane. Observe, too, that the corresponding fibres (which thus subserve vision of the opposite side) do not decussate but pass direct to the corresponding hemisphere, which, in consequence (as in fishes and birds) also perceives objects on the opposite side. Now it is found that as the vertebrate scale is ascended and the binocular range increases, more and more of the temporal fibres fail to decussate, passing instead direct to the corresponding cerebral hemisphere, until, finally, in the anthropoid apes and man (whose eyes are not only placed in the front of the head, but which also admit of extreme convergence), all the temporal fibres are direct. The effect of this arrangement is that in binocular, as well as in periscopic animals, each hemisphere perceives objects on the opposite side of the sagittal plane.

Carnivorous birds (such as owls and hawks), with eyes looking forward, are an exception to this rule. In them, as in all birds, optic decussation is complete.

The object of binocular vision is to obtain stereoscopic (" solid ") vision. This, however, is not achieved until the axes of the two eyes can be converged upon an object, and thus cause it to be imaged upon each macular region, where vision is most acute. Each increase in the power of convergence marks an advance towards perfect stereoscopic vision, for the nearer an object can be " fixed " with both eyes, the greater is the unlikeness between the images belonging to the two eyes, and the greater, therefore, the stereoscopic effect.

Vegetable-feeding animals need a wide visual range for protection against their carnivorous foes. Accordingly, we find that in them vision is extensively panoramic, admitting of considerable range posteriorly, while their binocular vision is correspondingly limited. In the rabbit and the hare, with little or no binocular vision the non-decussating (direct) optic fibres are very few in number. In the ungulates the binocular field in somewhat wider: in the horse, about one-sixth of the fibres are direct.

In the carnivora accurate near vision is needed for seizing the prey: hence they have a wide range of binocular vision and a proportional number of direct optic fibres. Monkeys, which seize objects with their hands and subject them to close scrutiny, are endowed with a high degree of stereocopic vision, and the number of direct optic fibres is correspondingly great. In the anthropoid apes the behaviour of the optic fibres as regards decussation is much the same as in man.

The visual field.—It is necessary to remember that the movements of the eyes have little or no appreciable effect upon the limits of the visual field. Those remain much the same when the head is maintained in one position, no matter in what direction the eyes are moved. The object of eye-movements is not to extend the field in different directions, but to bring particular portions of it within the macular range.

The visual field of each eye extends more towards the temporal than the nasal side (Fig. 8), being limited in the latter direction by the projecting nose. It is normally more extensive in some than in others. For example, the retina does not extend so far forward in myopic as in normal eyes, and this causes a corresponding reduction of the visual field. The larger the pupil, the larger the field. The field may also be greatly reduced in debilitated states of health.

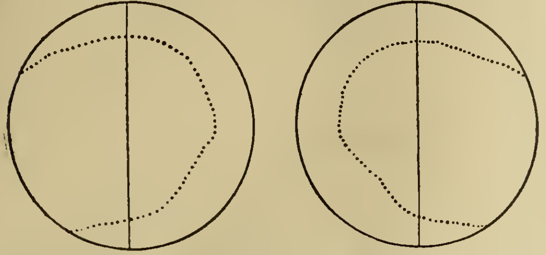

FIG. 8.—The outer circles represent the perimetric chart. The inner interrupted lines represent the boundaries of the two visual fields. It will be observed that the temporal portion of the field is more extensive than the nasal.

When an object is slowly introduced into the periphery of the field its presence, though not its exact form, is perceived before its colour. The colour field is thus less extensive than the actual field. Nor is the field the same for all colours: the order in which colours are normally perceived from without inwards is as follows—white, blue yellow, orange, red, green, violet. On the other hand, the peripheral portions of the retina are much less sensitive to form than to colour. The form of letters, *e.g.*, can only be perceived when they are imaged on the central portions of the retina.

In testing the visual field the upper lid should be lifted with the finger. Accurately to test the visual fields of the two eyes a perimeter is required, but a rough test may be made in either of the following ways:

The patient and the observer sit down opposite each other but in close proximity, and with their eyes on the same level. Thus each covers a *vis-a-vis* eye. The fields of the uncovered eyes ought then to correspond approximately, for the bridge of the nose which limits the field on one side limits it on the same side in each case. The observer now introduces his hand at various points in the periphery of the field, rapidly moving the fingers all the time, but taking care to keep them in the vertico-transverse plane midway between his own eyes and those of the patient. If the fields are normal both persons should see the fingers at about the same time. The colour fields and the central region of the field can also be tested in this way. In employing the test care should be taken that the incidence of light is the same for both observer and patient.

In the second test method one eye of the patient is covered, and he is asked to fix his uncovered eye upon a spot marked upon a dark surface, such as a blackboard, placed at a distance of about eight inches. A piece of white marking chalk is then brought into the visual field from various points of the periphery, and those at which it is first perceived are marked off on the board and joined. The colour field can similarly be tested, as well as the central areas of the field.

(To be continued.)

THE SURGICAL TREATMENT OF SARCOMA OF THE LONG BONES (a)

By SIR FREDERIC EVE, F.R.C.S.,
Senior Surgeon to the London Hospital.

FOR purposes of treatment sarcomata of the long bones fall into three groups:—

(1) Periosteal sarcomata.
(2) Central sarcomata composed of round and spindle cells.
(3) Myeloma (myeloid sarcoma).

(1) *Periosteal Sarcomata.*—The periosteal sarcomata spread locally along the periosteum, endosteally through the medulla and also along the muscles attached to the affected bone. Extension into veins was so early that in many cases, especially in sarcoma of the femur and humerus, metastases were present when the patient first came under observation. Sarcomata of these bones frequently involved the axillary and femoral glands respectively.

Amputation in periosteal sarcoma must remove the affected bone in its entirety, and if possible the whole or a considerable part of the length of any muscles attached in the neighbourhood of the tumour.

In periosteal sarcoma of the humerus Berger's operation was usually necessary.

Notwithstanding the unsatisfactory results of treatment of periosteal sarcoma of the femur, he thought the patient should be given the remote chance afforded by amputation of the hip joint. With modern methods of combating shock the immediate danger of the operation was slight. The speaker had performed eleven consecutive amputations of the hip joint without a death.

Periosteal sarcoma of the upper third of the leg and of the fore-arm should be treated by amputation at the lower third of the thigh and humerus respectively.

(2) *Central Sarcomata Composed of Round, Spindle or Mixed Cells.*—The lower degree of malignancy of these tumours must be ascribed to their being surrounded by a capsule of bone, but in many instances there was a wide infiltration of the medulla and the osseous capsule had been broken through. In the latter case they should be treated on the same lines as periosteal sarcomata. Otherwise it would appear safe to amputate through the affected bone some distance above the disease. Cases were quoted indicating that in some examples of central spindle celled sarcoma resection might be resorted to.

(3) *Myeloma (Myeloid Sarcoma).*—In most situations these tumours exhibited a purely local malignancy, but this did not appear to be always true of myelomata of the femur and humerus; and cases were quoted of myelomata of these bones in which metastases occurred after amputation. The statistics of the London Hospital showed that all cases that could be traced of myeloma treated by operation (during the last ten years) were well for periods varying from one and a half to eight years; but all those of the humerus and femur were treated by amputation. Four cases involving the upper ends of the tibia and fibula respectively were treated by resection or erasion and none recurred.

The speaker was of opinion that the higher malignancy of myeloma of the femur and humerus depended rather on the seat of disease than on the structure of the tumour. The nearer the body the greater the malignancy would appear to be true of myelomata as well as of periosteal sarcomata.

Myelomata might be treated by erasion, resection or amputation, according to the seat and extent of the disease; but conservative treatment was much less likely to succeed in myeloma of the humerus and femur.

(a) Abstract of paper read in the Surgical Section of the Royal Society of Medicine on Tuesday, November 12th, 1912.

A surgeon about to operate for sarcoma, especially if it were a central tumour, should have a microscopist in attendance for the purpose of making a fresh section; and it some cases it might be advisable to postpone operation for a careful examination.

The recent advances in the surgery of transplantation of bones, cartilage, and even of joints, had opened up a new field for the treatment of myelomata in selected cases. A portion of bone from the same individual was utilised (autoplasty), or from an amputated limb or a corpse (homoplasty). In the first category the fibula had been widely used for grafting, both in resections of the upper end of the tibia and also of a bone at a distance such as the ulna. If fresh bone were used the periosteum should be preserved, as new bone formed beneath it. He showed a patient in which the fibula had been used for bolting the bones together after resection of the upper third of the tibia for myeloma with a good result.

A case was quoted in which Kausch had successfully employed a graft of bone from a corpse to replace the upper end of the tibia removed for myeloma; and cases in which Küttner had successfully used corresponding portions of bones from corpses to replace in two instances the upper third of the femur and in another instance the upper end of the tibia. It was quite evident that bone grafting had a future before it in selected cases.

The speaker had been especially asked to make some remarks on the treatments of sarcoma with Coley's fluid. After detailing Coley's results and views as regarding the treatment of sarcoma of the long bones with his fluid he quoted the results obtained at the London Hospital. In no instance had any improvement occurred in periosteal sarcoma of the long bones. As regards the prevention of recurrence by Coley's fluid he stated that in the only three of his own cases in which a striking diminution of the tumour had occurred under the toxins, and subsequently local removal had been performed, in two cases local recurrence took place and in one metastasis.

It was undeniable that a certain number of sarcomata disappeared, or were profoundly influenced by the toxins, but we had no means of determining what proportion this was to the total number treated. He believed that it was only a small proportion.

His present attitude was unfavourable to the employment of Coley's fluid in any case of operable sarcoma, and even as a prophylactic against recurrence.

PERFORATED DUODENAL ULCER (*a*)

By JOHN W. STRUTHERS, M.B., B.Ch., F.R.C.S.Ed.,

Surgeon to the Leith Hospital; Lecturer on Surgery in the School of Medicine of the Royal Colleges of Edinburgh.

The paper was based on a study of twenty-seven cases. The cases occurred at all ages, but only one of the series was a woman.

Seventeen cases gave a history of previous aggravated dyspepsia. Vomiting was rare. In only one case was there a history of melæna. In some cases pain occurred almost immediately after the ingestion of food. Hunger pain is not necessarily associated with duodenal ulcer. Five patients had suffered from occasional dyspepsia, but any slight symptoms they had would not have been sufficient to justify a diagnosis of duodenal ulcer at all. A third group of cases had no previous history of digestive discomfort. Too much reliance must not, therefore, be placed upon the previous history.

There is no premonitory sign or symptom which indicates that perforation is imminent, and there is no direct cause for its occurrence. After the perforation has occurred, pain, muscular resistance and general abdominal tenderness often make diagnosis easy. By the time the patient is seen by the surgeon, however, the period of reaction has set in and diagnosis may be difficult. Pain may have disappeared either spontaneously or as the result of sedative medicines, and in some cases the pain may be referred to the right iliac fossa. Such cases are apt to be regarded as appendicitis, but suspicion may be aroused by the widespread muscular resistance, and by the fact that the temperature and pulse are not markedly raised. In some cases the differentiation may be impossible, and in such cases it was the author's custom to open the abdomen through the right rectus muscle, just below the umbilicus, and explore the appendix, and then, if necessary, extend the incision upwards. In muscular subjects with strongly contracted muscles it is important to have the muscles thoroughly relaxed, and the anæsthesia must be as deep as is consistent with safety. Chloroform alone has been preferred. The previous use of morphia seemed to diminish the activity of the respiratory centre.

In all cases the perforation was found on the anterior aspect of the duodenum within an inch or an inch and a-half of the pylorus. Its size varied greatly. The wall of the duodenum was usually œdematous and friable. Solid material was not found in the peritoneal cavity, except in one case where perforation followed shortly after the administration of a bismuth meal. The copious peritoneal exudate prevents the making of any accurate estimate of the amount of fluid escape. The ulcer is closed by interrupted sutures of thick catgut introduced at right angles to the long axis of the pyloro-duodenal junction. Number 2 or 3 catgut, not chromicised, makes the best suture. When the patient is desperately ill the operation is finished by swabbing out excess of fluid, inserting a large tube into the pouch of Douglas and closing the upper wound. But when the patient's condition justifies it, a posterior gastro-enterostomy is performed. Closure of the perforation does nothing to alter the conditions which have given rise to the ulcer and nothing to prevent relapse or recurrence of symptoms, and the necessary narrowing of the duodenum must tend to prevent the healing of the old ulcer or to increase the liability to the formation of a new one. The puckering and irritation of the stitches probably interfere with the proper action of the pylorus. In seventeen of the present series posterior gastro-enterostomy was performed, and all of them did well. Out of three cases in which gastro-enterostomy was not done two have symptoms which suggest the presence of an ulcer, while the third is free from dyspepsia as he was before operation. Washing out the peritoneum is not necessary, and probably harmful. A supra-pubic drain is sufficient to carry away any excess of fluid which may be poured out.

Results.—Two of the cases were moribund when seen. The remaining twenty-five were operated upon, and twenty recovered. These owe their recovery to early operation.

The *conclusions* reached were:—

1. That duodenal ulcer may be present, and go on to perforation without giving rise to characteristic symptoms before perforation.

2. There are no symptoms which may justly be termed premonitory of perforation.

3. After perforation diagnosis may be difficult,

(a) Paper read before the Edinburgh Medico-Chirurgical Society November 6th, 1912, Mr. J. M. Cotterill in the Chair.

either from the pain being referred to the region of the appendix or from early and marked abatement of the severity of the symptoms.

4. Catgut may safely be used for purposes of suture, and is preferable to silk for this purpose.

5. Gastro-enterostomy should be done at the operation for closing the ulcer when the patient's condition permits of it, since this measure promotes immediate recovery and lessens the tendency to recurrence of ulceration.

SHOCK. (*a*)

By F. G. CROOKSHANK, M.D.Lond., M.R.C.P.,
Assistant Physician, the Belgrave Hospital for Children, etc.

The discussion and understanding of shock, although of paramount importance to the clinician, the physiologist, and the lawyer, is involved in much obscurity. Perhaps it would be well to avoid, at any rate, terminological confusion by setting on one side, as distinct from shock, the condition known as "collapse." By "collapse" we mean that sum of bodily states which is associated with loss or draining of the vital fluids, as in hæmorrhage or cholera. Shock remains as the sum of conditions obtaining when the reaction by the nervous systems to afferent impulses is incompatible with the usual performance of vital functions; so that the patient may die without the necessary coincidence of any obvious lesion in itself inconsistent with life. But, of course, shock and collapse may coexist.

We cannot hope to estimate the intensity of the afferent impulses that is requisite to destroy life by shock; for, as Mr. Tyrrell Gray has said, we have to reckon with the shock value of the individual. Probably this shock value is a physiological "function," but there are racial values, as well as individual values. In great measure these depend on the state of the internal secretions or their balance. Thus, the hyperthyroidal Bengalee has a higher shock value than the negro, and the lively Gaul is more easily perturbed than the phlegmatic Teuton. Still, the shock value of an individual varies from time to time, and different parts of the body have different shock values. A tap below the belt may wind a man on whose thorax I could hammer without causing distress; and there are other elements—to wit, that of unpreparedness. A false step in the dark may momentarily shake the nerves of a man who will take the spills of a day's hunting without turning a hair; and the late Mr. Dent pointed out how a policeman, suddenly injured when on duty in a street brawl, will suffer more severely from shock than a soldier wounded in action.

Again, the trauma may be what is called "psychical," as when a piece of bad news is communicated, or there is a sudden and terrifying sight; although there is always a physical process underlying psychical impression. When these factors are considered, it must be agreed that, unless there be definite simulation, we have little justification for aspersing one who complains of serious perturbations on an occasion that may seem to us trivial. Many people have, indeed, as we say, died of simple fright.

I spoke just now of the nervous systems designedly; for we have not one, but three, nervous systems. We have the cerebro-spinal nervous system, the sympathetic nervous system, and also the co-ordination of parts of these two into a third organisation—the autonomic nervous system. If, for the sake of legal members, I may hazard an illustration, I would say that just so in this country we have a fairly stable and organised aristocracy and a less coherent democracy; though the system on which the stability of the constitution depends is that formed by the cooperation of a part of the aristocracy, and a part of the commonalty. And, seemingly, in shock the maintenance of the functional integrity of the autonomic system is seriously compromised. It is certainly true that what doctors call "shock" (meaning thereby the consequences of a shock) is, in part, a defensive reaction of the autonomic nervous system against assault that has been committed. It fails of its purpose at times, no doubt, and may even be too intense for the safety of the organism. But the fact remains that, as Crile has pointed out, the shock mechanism is one forged many generations ago in the history of the race, when some apparatus was necessary to secure instant preparation for flight or withdrawal on occasion of danger.

Poke a snail with a straw, and see it draw in its horns. Such are the beginnings of the complexes of shock and of traumatic neurasthenia which so admirably contribute to the support of our twin professions. But just as a rifle may have too light a pull, so may the shock reaction be overdone, to the disadvantage of the organism.

It is perhaps somewhat unfortunate that, owing to the possibly excessive attention paid to experimental work of late years, shock, to the minds of many medical men, has come to mean an affair of blood-pressure curves, and what not, that can be best investigated in dogs and on rabbits. And so some of the shock effects that can hardly be investigated save by observations on human beings have become a little discredited, and are almost treated as if they had no existence, or, at any rate, no right to be mentioned in polite professional society. It is to some of these shock effects, and particularly to those indicated by the term "delayed shock," once in some clinical favour, but now a little in the shade, that I propose to refer.

If we have to state the most intense form of shock, we at once think of those cases of sudden death, where there is no precedent disease, that are brought about by events which produce no obvious lesion. Such deaths happen when there is sudden immersion in water, and the individual dies without having time to drown. Other examples are narrated by Brouardel in his book, wherein he, following Brown-Séquard, speaks of them as deaths from inhibition. Let me give you an instance.

Last summer a Sikh was cycling through a London street. He had a side-slip when opposite a hospital. He was at once taken in, but no injury was found save a dislocated thumb, which was reduced. He turned to leave the hospital, and died on the doorstep. At the *post-mortem* neither injury nor disease was found. When, however, shock falls short of immediate death production, there may be a very serious condition lasting some twenty-four hours or so, which may be terminated by death or may end in gradual recovery. This is the common kind of shock, from which we say people suffer after operation or serious injury. But there is a group of serious cases in which, after the infliction of some trauma, the subject displays emotional perturbation, rallies, seems to be doing well, and yet ultimately develops symptoms which may be indifferently severe or may terminate in death.

The cases from which there is recovery sometimes pass as "traumatic neurasthenia," in which, as all know, a definite latent period elapses between the symptoms immediately displayed and those that "come on" later, and give us so much occasion for professional activity. The cases in which, after a latent period that may be long or short, grave and even fatal consequences ensue, are those to which I now refer as cases of "delayed shock," using a term that is, or was, consecrated by use. Common to both traumatic neurasthenia and delayed shock are unexpectedness of the trauma, and high psychical, rather than physical, value of the causative incident.

The prolonged anxiety and stress of shipwreck is not so effective in producing traumatic neurasthenia or delayed shock as in a railway collision; or a prank played on a kitchenmaid with a turnip, a clothes-prop, and a candle.

Now, it is not an unreasonable induction that the symptoms which follow the latent interval are perhaps due to the exhaustion of certain mechanisms in combating the immediate effects of the physical or psychical trauma. And, indeed, years ago Mr. Furneaux Jordan very acutely pointed out that many of the immediate manifestations of what we call

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(*a*) A paper read before the Medico-Legal Society, Oct 22, 1912.

"shock" are really efforts of the organism to combat the effect of the trauma. When we have a sudden fright, if taken off our guard, we turn pale. The blood is diverted from the skin, where it is not needed, to the heart and lungs, so that these organs are well supplied for the immediate flight prompted by our ancestral origins.

Now, the experimental work of Cannon and his associates seems to prove that when animals have been subjected to injury, or deliberately frightened to death, the adrenal system (a part of the mechanism that manages the blood-distribution) may be so completely exhausted by its efforts that it becomes bankrupt, and death ensues. In these experiments we seem to see the physiological explanation of the phenomena of "delayed shock" in human beings. Cases of delayed shock are not very uncommon, but they are often masked. We all know how usual it is for an aged person to die a week or two after a slight fall that has involved fracture of the femur. This is "delayed shock." It escapes recognition as such only because there is, what sounds formidable, a fracture of the thigh. Yet a fracture of the thigh is itself a trivial affair so far as life is concerned. It is true that sometimes a low kind of pneumonia ensues, but not always; and even when it does, there is a valid explanation. At any rate, the pneumonia itself is seldom so severe as necessarily to interfere with life. Again, after burns, death from delayed shock is not infrequent even when no vital organ has been implicated and there is little sepsis.

The point that I am anxious to establish is this: that when death occurs ten days or so after trauma, we should not hesitate to ascribe death to the "accident" merely because there has not been present such a totally irrelevant lesion as a fracture of the thigh or an extensive scald. I do not say that such deaths are very common, for obviously there usually is a lesion; but they do occur. I have met with several, and have had the opportunity of inquiring into others. Many have been recorded in forgotten papers; but the modern text-books ignore them in most remarkable fashion, and even so erudite a compilation as Mr. Knocker's makes no mention of their happening. Though they present, as is only natural, points of individual difference, there are not a few symptoms from which we can construct a common denominator. There is usually immediate manifestation of some psychical agitation; but this may pass off. There is a longer or shorter period in which the patient may seem to be suffering hardly at all; and there are indications of interference with the visceral functions. The blood-pressure is affected, and the heart tends to dilate, for it loses tone; the urine is scanty; the bowels are obstinately constipated; flatulence and eructations are common; and there is a good deal of shortness of breath. As it may be the respiratory, the cardiac, the gastric, the intestinal, or other symptoms, that notably attract the doctor's attention, so, if death occurs, it is ascribed to congestion of the lungs, to heart failure, to pressure of the stomach on the heart, to stoppage of the bowels, or even to suppression of urine. (*a*) Sometimes the flatulence, constipation, and distension are so marked that operation is proposed and carried out; but no condition is found within the surgeon's ambit.

When after trauma there are continuing hysterics, the patient will probably win through with little physical damage. When the early psychical disturbances have play, but are controlled, traumatic neurasthenia, or the more marked type of "delayed shock," may ensue. But sometimes there is no initial hysteria; the subject displays a peculiar apathy, and death is pretty sure to follow.

You will all remember how when—

> "Home they brought her warrior dead;
> She never spoke nor uttered a cry;
> All the maidens watching said:
> 'She must weep, or she will die.'"

In such cases the autonomic nervous system is thoroughly disorganised, probably by inhibition from above. The connections at the synapses are broken, and unless contact is re-established death may ensue.

The warrior's lady had her fount of tears dried up, and probably she was obstinately constipated and passed no water; when her autonomic nervous system got to work again not only the tears, but other secretions were doubtless abundantly established, with excellent results.

Mr. Clinton Dent once related how, many years ago at St. George's Hospital a water-tank burst through a ceiling and the floor below, carrying with it in its career a bed in which was a woman convalescent from some unimportant affection. This woman, in spite of her precipitate descent to the lower ward, sustained no overt injury save a trifling scalp wound. But she passed into a curiously apathetic condition, like that exhibited by some patients who have been burnt. She was seen by the late Mr. Cæsar Hawkins, who said that, though he could give no reason for his opinion, yet his experience taught him that she would die. She did die, about three weeks after the accident, and at the *post-mortem* no lesion was discovered. Mr. Page recorded the case of a girl who was shaken in a railway accident. She was hysterical at the time, but rallied, then took to her bed and died, without any obvious reason, in about five weeks. Sir Samuel Wilks narrated other cases of the same sort.

Mr. Turner several years ago reported the case of a man who fell when crossing a railway track, and broke his leg. That same night he developed retention of urine, absolute constipation, and abdominal distension. In two days he was lying in bed "like a ball." He had no peritonitis or other indication of visceral injury. But he died on the tenth day. It is true that before he died some pneumonia developed, but, as Mr. Turner says in a pregnant phrase, this shows that the shock had affected other organs than the bowels.

Cases of what is called "traumatic pneumonia" are not very uncommon, and one—the case of Etherington—is a legal classic.

But the usual explanation given is that the accident or injury in some mysterious way lowers the patient's vitality, and renders him or her more susceptible to the pathogenic growth in the lungs of the pneumococcus, which is, of course, a very usual denizen of the mouth. This mysterious lowering of vitality seems to me a phrase which explains nothing.

It has some appearance of plausibility when the pneumonia follows a blow on the chest, but it loses force when we consider the case of a man with a broken leg; so that it is then usual to suggest that the pneumonia is hypostatic, the result of congestion of the lung from confinement to bed. Mr. Turner's case forces us to seek some other explanation, and his expression, that the pneumonia showed that the shock had affected other organs than the bowels, carries us some way towards an understanding.

Everyone knows that, in spite of the jeers of therapeutic nihilists, a poultice or a mustard-plaster applied to the skin does affect the functional state of deep-seated organs. And we know that disease processes in certain organs give rise to pain in correlated skin areas. Now, whereas till lately the notion of what is called "counter-irritation" had been a little discredited, the phenomenon, for instance, of abdominal pain and tenderness in pneumonia does show us that there is an active connection between the cutaneous nerves and the viscera, and no longer renders it foolish to think that an active poulticing may, through the nerves controlling the distribution of blood to an organ, so affect the vascular state of that organ as to favourably influence disease processes.

And we have physiological justification for assuming or believing that, let us say, the application of cold to the skin may, under certain circumstances, so affect the state of deep viscera, in respect of the local circulation of blood therein, as to pave the way for the establishment of an active microbic inflammation.

We, know, too, that normally certain skin areas are correlated with certain viscera for good or for evil. But we have to reckon with the phenomenon of irradiation, whereby the effects of an intense nerve impression spread to units of the autonomic nervous system

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(*a*) In a measure the "shock mechanism" may be concerned in some "Obstructive" suppressions of urine. The relation of Graves's disease to shock should not be forgotten.

(which is, indeed, a series of segments or units) other than the proper one. You may in some buildings see a telephone switchboard so arranged that different persons can be called, or can call, independently. Such is the normal arrangement of the autonomic system, whereby skin areas can call up visceral areas, and *vice versa*. But an arrangement may be made so that if a call of fire is received at the office a special switch can be thrown over, and the various instruments can be simultaneously rung. If the operator is a fool, this is done unnecessarily.

And in shock something of this sort seems to occur; so that we can see how it is that, as in Mr. Turner's case and others, a physical and psychical trauma may, given certain conditions, adversely affect the vascular state not only of the bowels, but the lungs. Neuhof, an American physician, has lately paid particular attention to this mechanism for the occasional production of pneumonia. He calls some such cases of pneumonia "vagus pneumonias," for physiological reasons.

A case of great legal and medical importance came under my notice a few months ago. The subject was a man well known to me by repute—healthy, sober and active. His age was 49. On the evening of November 14th last he left the house of a friend to walk to the station. In passing through the grounds he missed his way, and stepped suddenly over the perpendicular bank of a brook, or ha-ha, into the water below. The height of the bank above the water was 4 feet, the depth of the water about 2 feet 6 inches. He fell on to one knee, but was not immersed; so scrambled out and made his way back to the house in a state of some agitation. He was, in fact, at first hysterical. However, he got home, a distance of some miles, in a cab, and was seen by a doctor, who found no injury save a grazed knee. The next day the unfortunate gentleman went to his office as usual, but complained of shortness of breath and some pain in the loins. The hysteria had been controlled.

He began to suffer from what seemed to be flatulent dyspepsia; the wind was indeed incessant; he was obstinately constipated and passed little water. He became worse, yet attended intermittently to business. On November 30th, sixteen days after the accident, he died suddenly after drinking a glass of water to relieve his "wind."

A claim was made on a company in which he was insured on the ground that death had resulted from the accident. A *post-mortem* examination was ordered; no sign of any injury or surgical condition such as embolism was found. But there was recent dilatation of the stomach and some dilatation of the heart. Owing, however, to the undoubted fact that decomposition had advanced with extreme rapidity in a few hours, it was not, in the opinion of some who were present, possible to be definite as to the non-existence of fatty degeneration. Therefore the claim was disputed—apparently on the ground that the deceased died from heart failure, possibly in some measure due to a hypothetical precedent degeneration, but certainly in the last resort determined by the "flatulent dyspepsia," if not by the drink of cold water. It was also suggested that the flatulent dyspepsia was, together with the constipation, set up by lack of exercise, consequent on the slight knee injury and the rest at home. In fine, death was not due to the accident.

At this stage my opinion was asked by the solicitor for the widow, and I gave it to the effect that if there had been no accident the fatal event would not have occurred—that, indeed, the case was one of delayed shock. Learned counsel was then good enough to read me the case of Etherington, as illustrating the legal point that we might have to meet. This case is one of a gentleman who had a fall in the hunting field, went up to town the next day, fell ill and presently died of pneumonia. It was claimed that the pneumonia developed as a result of the vitality having been lowered by the shock of the fall, pneumococci being present in the body at the time. The claim was disputed on the ground that the terms of the policy denied benefits if there should be intervening causes between accident and death, and it was asserted that the pneumonia was such an intervening cause. On appeal, the Lords Justices held that the insurance company was not entitled to relief if the intervening incident or cause were a link in the natural chain of events or causes developed between the accident and the death, inasmuch as the words of the policy were to be construed as applying only to the fortuitous intervention of some other or fresh agency causing death. They held that the pneumonia was no such fortuitous intervention, but an incident in the natural chain of events, and gave judgment against the company. In our case I certainly thought that there was not the intervention of any fresh agency; and so we went to arbitration. But after the hearing of witnesses as to fact, an offer of compromise was made and accepted, so that the question of delayed shock was never submitted to the learned arbitrator.

I think you will agree with me that it is important that the exact nature of cases such as these should be defined. In the case of Etherington there was a definite intervening illness, indicated at the *post-mortem* by the usual signs. Superficially it might seem that here the insurance company had a good case. But, apart from the luminous interpretation of the words of the particular policy by Lord Justice Williams, medically they had a bad one. Only the medical witnesses for the claimants might have put their case a little higher—"precised it," as the French say—and, instead of speaking generally of lowered vitality, drawn attention to the definite mechanism that exists in the autonomic nervous system for the production, in shock, of disturbance of function in special viscera. In my case, however, there was no gross or organic condition such as pneumonia to set up as an intervening agency; there was really no disease at all discoverable at the *post-mortem*, and until the time of death there had been no symptoms that required the assumption of what we call "organic change" to render them comprehensible. It was apparently because there was no more than functional disorder manifested that the insurance company hesitated to meet the claim. If there had been the fracture of even one bone, had there been a patch of pneumonia no bigger than a crown-piece that we could have sworn to, all would have been well. But neither the discovery of a fracture nor the existence of a pneumonia would have really made the case any stronger. And, after all, the man was dead. A healthy, sober man, who had never before spent a day in bed, died sixteen days after the accident while under treatment for flatulence and constipation. He died of "delayed shock," as it is called, truly and unquestionably, as did the persons whose cases I have already narrated, and as every day do people die who have broken a femur, or have been burnt, or suffer from post-operative ileus.

It is not necessary to labour the point that in this, as in other cases, the trauma was *unexpected*. But it links these fatal cases with the non-fatal ones, in which, equally, there is no symptom that may not be referred to functional derangement—namely, those of traumatic neurasthenia, wherein also it is clear that the protective mechanism of the body is taken "offside." There is no time for preparatory adjustment of the blood distribution in the body to the purpose. And it is then easy to understand how, given a high shock value, under such circumstances the protective adaptation may be out of all proportion to the occasion, as when the telephone operator is excited by a rumour of fire. What the exact significance of the latent interval is, it is difficult to say, but it must be observed how generally there is some flatulence, which in slighter case may pass as due to dyspepsia, and in the more grave may lead to such distension that the surgeon's aid is invoked. Now this flatulence is not dyspeptic. It has, it is true, an intimate relation to the flatulence of what is called "neurotic dyspepsia," but, as I have tried to show elsewhere, (*a*) this flatulence, too, is an affair of actual gas secretion from the stomach and bowels, and brings the shock cases we have been discussing into line with those of acapnia, to which so much attention has been directed by Professor Henderson of Yale, and Dr. Crile. In all these curious cases in which gas secretion occurs three

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(*a*) "Flatulence and Shock." H. K. Lewis, 1912.

systems are involved—the vasomotor, the autonomic nervous, and the adrenal. The direct connection between the adrenal system and the production of gas in shock and in acapnia has, I think, had light thrown on it recently by Falta and by Fuchs, who have shown that the adrenal system not only provides, as we know, a substance that influences the tone of the blood-vessels, heart, stomach, bowels, and other organs, but a substance or substances that seemingly control the internal respiration—the exchange of gases between the tissues and the blood. If, then, Cannon is right in holding the adrenal or chromaffine system responsible for the adjustment of the body in cases of shock, we can understand how it is that the symptom of flatulence, though present in varying degree, is a thread linking many of these conditions together.

Whether this gas secretion is indicative of exhaustion of the adrenal system, or whether it marks the excessive activity that heralds exhaustion, or whether it is sometimes or always an expression of perversion, rather than of excess or deficiency, it is hard to say. On the answer to these questions depends probably determination of the treatment that we should prescribe.

The practical notion that I put forward is that, just as we attempt to assay the life-value of any candidate for life insurance, so must we address ourselves to estimating the "shock value" or suggestibility of persons who are to be insured against accident.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Edward C. Hort, F.R.C.P.Ed. Subject: "The Causes and Treatment of Fever."*

OPERATING THEATRES.

WEST LONDON HOSPITAL.

Laparotomy for Chronic Obstruction of Pelvic Colon.—Mr. Swinford Edwards operated on a woman, æt. about 45, who some six years before had undergone a laparotomy, when, according to her account, her left ovary had been removed for some inflammatory trouble. For the last year or two she had been suffering with symptoms of colitis and considerable difficulty in getting a satisfactory evacuation of the bowels. She had passed at times much mucus, which was often blood-stained. Sigmoidoscopic examination revealed considerable ulceration in the upper rectum, and the instrument would not pass further than 15 centimetres. Thinking that the condition of ulceration was sufficient to account for her symptoms, daily injections of chinosol in the morning and protargol in the evening were prescribed. It was found that the patient could not retain very much in the lateral decubitus position, but on resorting to the knee-elbow position as much as two pints could be injected and retained. On seeing the patient again at the end of a month, it was found, by the use of the sigmoidoscope, that the ulcerative proctitis was all but well; but again it was found impossible to pass the instrument higher than 15 centimetres, and this difficulty was experienced on two or three subsequent occasions. As the patient wanted to return to the West Indies, and still complained of abdominal pain at times, accompanied by sickness and difficulty in getting the bowels open, Mr. Edwards advised a laparotomy, believing that the sigmoid colon was bound down by adhesions, probably due to the former operation.

On opening the abdomen, the diagnosis was confirmed, for the pelvic colon was found to be bound down to the left broad ligament and uterus; the adhesion between the bowel and uterus was exceptionally strong, being very dense and of the size of the index finger. On cutting through this, a residual abscess cavity was disclosed, containing in its centre a ligature of thick twisted silk. Mr. Edwards proceeded to excise the entire abscess cavity; this exposed the outer aspect of the mucous membrane of the bowel, therefore the wall of the gut had to be repaired by a double layer of sutures. Many other adhesions had to be divided in the left pelvic region. It was then discovered that the patient still retained both ovaries. The abdomen was closed without drainage.

Mr. Edwards said that this was a very interesting case, especially in showing the use of the sigmoidoscope, for without its aid the condition of obstruction due to the adhesions could only have been guessed at. To account for the presence of the thick silk ligature found in the residual abscess cavity, he imagined that at the previous operation the colon may have been injured, and the ligature in question was the one used in closing the opening; though he thought it was somewhat extraordinary that such a thick ligature should have been employed for this purpose. The pain, he remarked, was no doubt largely due to the colitis and proctitis which at first were present, which pain materially decreased when the ulcerative condition of the bowel had disappeared under the treatment employed. In spite of this, however, abdominal discomfort and difficulty in evacuation still remained, owing, of course, to the adhesions.

It is interesting to state that the patient made a good recovery, and the action of the bowels was almost normal a month after operation.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Obstetrical and Gynæcological Section.

Meeting held Thursday, November 7th, 1912.

The President, Dr. Amand Routh, in the Chair.

Dr. G. R. Drummond-Maxwell brought forward a case of

eclampsia treated by cæsarean section.

The patient was a primigravida, æt 19, admitted to Queen Charlotte's Hospital on July 23rd, 1912, at 9.35 a.m. Three fits had occurred before admission. She was having weak pains every twenty minutes, and the fœtal heart sounds were regular and strong. The urine contained only a trace of albumen, there was marked œdema of the legs, and the blood pressure was 165mm. The cervix was rigid and only admitted the tip of the index finger. Two pints of saline were injected per rectum. By 6.30 p m. thirteen fits in all had occurred, the labour had made no progress, and the patient had been comatose since 3 p.m. Cæsarean section was then decided upon and performed as soon as possible. Ether was the anæsthetic employed; the uterine incision was allowed to bleed freely; and two pints of normal saline containing 10 per cent. of glucose were poured into the peritoneal cavity after the uterus had been sewn up. No subsequent fits occurred, and both mother and child did well.

The author formulates the following indications for Cæsarean section in eclampsia :—

(1) Fits occurring in a primigravida.

(2) Onset of fits with no signs of the start of labour.

(3) A rapid succession of fits where consciousness is not regained and coma is deepening.

(4) Failure of advance of cervical dilatation after several hours of an expectant attitude with the prospect of many hours' delay before the second stage is reached.

(5) Absence of any definite signs of improvement after eliminative treatment has been carried out for several hours.

The presence of all these indications constitutes a case of such gravity as to render the operation justifiable.

Dr. J. M. Wyatt drew attention to

le fort's operation for prolapse,

and reported the results of eight cases.

This operation was described by Le Fort in 1877, the principle upon which it was based being that if the vaginal walls could be kept in constant contact with one another prolapse could not occur. He recommended the removal of a thin vertical strip of mucous membrane 2cm. wide from each vaginal wall;

he used silver wire sutures and laid stress upon the importance of bringing the whole width of the raw surfaces into apposition. Previous to Le Fort's operation various attempts had been made by Jobert de Lamballe, Gérardin, and others, to cure prolapse by constructing a vaginal partition. In 1889 André collected 40 cases treated by Le Fort's operation, 35 of which were successful.

In the author's opinion the operation is of great value in cases of procidentia in old people where any form of pessary fails to keep the womb in position, and where laparotomy for fixation is contra-indicated. He then described the method of performing the operation as carried out at St. Thomas's Hospital by Dr. Tate, and recorded eight cases, in six of which the after history had been traced, and the result was successful.

SHORT COMMUNICATIONS.

Dr. **Russell Andrews** introduced (1) a case of simultaneous uterine and extra-uterine pregnancy, in which "internal wandering" of the ovum seems to have occurred. (2) A small ovarian teratoma, containing, among other structures, brain and well-formed intestine.

Dr. **C. Hubert Roberts**. Urgent Cæsarean Section in a case of contracted pelvis, with prolapse of the cord. Recovery of mother and child.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Medicine.

Meeting held Friday, November 1st, 1912.

The President, J. O'Carroll, M.D., F.R.C.P.I., in the Chair.

"VITALISM" IN PRACTICAL MEDICINE.

The President delivered an Opening Address on this subject. Having given a brief review of the work of the Section during the thirty years of its existence, he addressed himself to the view of the nature of life put forward by Professor Schäfer in his recent address to the British Association for the Advancement of Science. He held that the physico-chemical explanation of life was unhelpful to the physician: that, however possible it might be that life might arise *de novo* from unorganised matter, it was nevertheless impossible to predicate that only the same forces, physical or chemical, operated in a living as in a dead thing. In life new force or forces came into existence, for which no convenient name other than "vital" force had been devised. That force showed its existence in many ways, but chiefly in its capacity of resistance to extinction. Vital resistance begot an adaptability to circumstances, a division of function among the parts of a compound organism for better maintenance and defence of the whole individual, and finally a power of compromise between contending or hostile organisms of similar or different kinds. That division of labour and power of compromise implied a certain social order which seemed an embryonic form of social ethics. The rise of an ethical or moral sense was a stumbling block in the evolutionary theory, running counter as it did to the doctrine of the survival of the fittest. For in a compound organism the cells of highest function were commonly the most vulnerable and the least capable of renewal; while the cells of lowest function usually made the longest defence, were most capable of proliferation, and were the last to die. The interdependence of high and low class cells gave each an interest in the survival of the others. In a community of similar organisms, within certain limits, the same law applied, and when it was forgotten the community suffered. Thus arose a communal morality, the ethics of mutual protection. If this view of life held good the rise of the ethical sense was a natural development and not a violent break in the history of life. Unless the terms "chemistry" and "physics" were to be extended quite beyond any accurate meaning they could not include ethics among their connotations. If they did they would have as little value as Professor Schäfer ascribes to "vitalism." In the practice of medicine the "vital" conception of disease was all important. It taught one to separate symptoms which were essentially morbid from those which indicated resistive or protective processes, and thus led to the adoption of treatment which would help and not obstruct the vital processes which made for survival of the individual.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

Meeting held on November 6th, 1912.

President, Mr. J. M. Cotterill, in the Chair.

Mr. J. W. **Struthers** read a paper on

PERFORATED DUODENAL ULCER,

which will be found on page 542.

In the discussion that followed Mr. **Cotterill** remarked that the absence of a history of melæna in so many cases was rather remarkable. In cases of doubt he preferred to make an incision low down in the pelvis, examine the appendix, and, if necessary, make a second incision higher up. In some of the difficult cases the incision might otherwise be rather long. The lower incision was useful for drainage. We were not yet in a position to say that gastro-enterostomy should be done in every case which could stand it. Some cases gave excellent results without gastro-enterostomy, and results were not always perfect after that procedure had been followed.

Professor **Caird** congratulated Mr. Struthers on his good results. He thought the practitioner was becoming more alert to the urgent necessity of early operation in these cases. He had frequently noticed improvement of the pulse after the abdomen had been opened, but he was not so certain that the good effect was always maintained after washing out the peritoneal cavity. He always at least washed out the pelvis. He favoured gastro-enterostomy after closure of the ulcer. There might be considerable narrowing of the duodenum.

Mr. **Cathcart** said that if the amount of effusion was slight there was no necessity to wash out but it did no harm. It often did good in removing fluid from the region of the diaphragm. He had seen subphrenic abscess follow in cases where washing had been omitted. He thought the presence of symptoms depended on the presence or absence of inflammation round the ulcer. The pain was sometimes due to spasm following hyperchlorhydria.

Professor **Alexis Thomson** was convinced of the great advantage of gastro-enterostomy, and if he were to be operated upon himself for ruptured duodenal ulcer he would certainly suggest that gastro-enterostomy be considered by the operator. In addition to the other reasons which had been adduced in favour of this course the ulcers were frequently multiple. His experience was that of the author with regard to bleeding. The cases with much bleeding did not often perforate.

Mr. **Wallace** wished to emphasise the importance of not overlooking the condition during the latent period. He had operated on three cases in which symptoms had entirely disappeared by the time he had seen them. He had also had difficulty in cases where the pain was referred to the right iliac fossa. He favoured gastro-enterostomy, but reminded the meeting that an American surgeon had analysed a long series of cases and found the results after gastro-enterostomy, and those in which it had not been performed were about equal.

Mr. **Miles** said that when he was in doubt as to the seat of trouble he made a pelvic incision, and passed a tube into the pouch of Douglas. From the characters of the fluid he could tell the seat of rupture, and he then made a second incision where it was needed. It was probable that the pylorus contracted when the rupture took place. He had once seen a perforation take place while the patient was undergoing operation. The use of cat-gut or silk was a matter of individual preference. He preferred the latter, as a smaller needle could be employed. He always washed out the peritoneum, though he was not prepared to say that was a necessary proceeding. He did not think the position that gastro-enterostomy should always be performed had yet been reached, and if that were laid down it might discourage country practitioners from undertaking the operation in emergency. In four cases he had performed pyloroplasty by splitting the pylorus longitudinally and stitching transversely. The pyloroplasty was, however, not equal to the gastro-enterostomy opening.

Mr. Dowden said it had been his fortune to open the abdomen on three occasions for typical symptoms of ruptured duodenal ulcer, but nothing had been found. In distinguishing between ruptured duodenal ulcer and acute appendicitis he had found percussion very useful as a means of eliciting the seat of most tenderness. He preferred to make two separate incisions in cases of doubt. In closing the ulcer he cut through the pylorus and continued the cut down the long axis of the duodenum, thus producing a pyloroplasty. He always had the pouch of Douglas flushed out while he was stitching up and then closed up everything, leaving as much fluid as possible in the peritoneal cavity.

Mr. Wilkie referred to the age incidence of the condition. There were two groups. One affecting young men and the other in patients aged from forty-eight to sixty. In the latter there was generally a history of hard work and alcohol, and there was nearly always arterio-sclerosis. The ulcer in this group was almost always at the upper border of the anterior wall, where there was great difficulty in getting an anastomotic blood supply if one artery were interfered with. He had seen duodenal ulcers in twelve post-mortems, and in only two cases had the condition been suspected during life.

Drs. William Guy and J. S. Ross read a paper on NITROUS OXIDE AND OXYGEN AS AN ANÆSTHETIC FOR DENTAL AND SURGICAL PURPOSES.

It was contended that this method had three great advantages. (1) It gave an anæsthesia closely resembling sleep. It interfered little with respiration, circulation, and alimentation. It was safe. Why it had not found a wider field was the cumbrous nature of the apparatus hitherto in use. A simple form of apparatus was described, by means of which it was possible to administer measured doses of both gases. The method lent itself admirably to short operations, but it was probable that the expert would be required to carry out the administration in prolonged surgical operations.

Mr. Wallace said he had seen the method in use in surgical operations. It required the assistance of an expert administrator, but its field of usefulness was just in those cases where an expert anæsthetist was likely to be called upon.

Mr. Wade said that the method was certainly of value in those cases where a fatty liver and other conditions might make the surgeon fear the effects of a general anæsthetic.

Mr. J. S. Frasse, while not denying that this might be an excellent method, said that ethyl chloride had been given in the ear and throat department of the Royal Infirmary in some 9,600 cases without any inconvenience to the patients, and the simplicity of the method was a great advantage.

Dr. Dawson Turner read notes on the TREATMENT OF A CASE OF LYMPHO-SARCOMA BY RADIUM.

The patient was a male, æt. 65. A tumour had been removed from the axilla, and had recurred in the region of the clavicle with enlarged glands. Twenty milligrammes of radium bromide in an aluminium case had been inserted into the mass, and 40 milligrammes had been applied through a silver screen to the tumour externally. Improvement was soon apparent, and the tumour became removable. This was done, and a capsule of radium had been placed in the cavity. The patient had been well for over a year.

Professor Alexis Thomson remarked that the case was both clinically and microscopically one of small-celled sarcoma, and the result had been very gratifying.

HARVEIAN SOCIETY OF LONDON.

Meeting held Thursday, October 31st, 1912.

The President, Dr. Hy. J. MacEvoy, in the Chair.

Discussion on

THE PREPARATION, CHOICE OF ANÆSTHETIC AND ITS MANAGEMENT IN DIFFICULT TYPES OF PATIENTS DURING ABDOMINAL AND PELVIC OPERATIONS.

Dr. Dudley Buxton, in opening the discussion, said that the underlying physical and pathological states which produced types of patients were the essential matters for the anæsthetist to study. Adopting as his guide that the patient's safety, the suitability of the anæsthetic to the particular operation, and the predilection of the operator for any anæsthetic or method should be placed in this order of importance, the anæsthetist had yet to remember that the success of the operation might depend upon whether the surgeon's *desiderata* were granted him, and upon this success ultimately must depend the patient's safety or chance of speedy recovery.

The environing conditions of the patient were those (1) outside the region of operation, the age and sex, his physique, his habits as regards drugs and alcohol, and so on, and such blood states as anæmia or toxæmia—*e.g.*, sepsis, glycosuria, albuminuria, cholæmia, and the presence of inter-current organic disease affecting the respiratory, the circulatory, or the hæmopoietic systems; (2) those due to abdominal or pelvic affections. Thus abdominal distension, sepsis and fever, with in some cases vomiting, possibly stercoraceous, introduced fresh factors into the problem presented to the anæsthetist. Such conditions had to be met partly by preparation, which included hygienic and drug treatment for some period before the operation, (3) the choice of the anæsthetic and method suitable to the case which offered the least likelihood of peril at the time of the administration of the anæsthetic, and promised the fewest deleterious after-effects.

Dr. Dudley Buxton pointed out the value to all concerned of giving the skilled anæsthetist the opportunity of studying his case with the home doctor before the operation. Subsequently the nature of the operation became a serious consideration, if, for example, it involved severe hæmorrhage, massive shock or prolonged and severe trauma. In ordinary circumstances dieting was essential, and adherence to the normal hours and habits of the patient should be practised, as otherwise dyspepsia and malassimilation occurred. Severe purging and even enemata were dangerous when employed on the day of the operation. Copious hot water ingestion or saline clysters given for a week previous to abdominal sections offered many advantages, as did rectal feeding with easily absorbed foods such as glucose.

The anæsthetic must be chosen after study of each individual case, and what was even a more important matter, the method of using it. Where lung complications existed chloroform with oxygen was usually the best anæsthetic. In other cases ether usually in sequence commonly proved suitable, but should be preceded by a dose of atropine. The question of shock, whether due to trauma, rough handling of viscera, or to hæmorrhage necessitated the adoption of a method permitting variation in the degree of narcosis appropriate to the condition of the patient and the exigencies of the operation. In all depressed states whether due to pre-existing blood disease or trauma, the chances of the patient's survival or ultimate recuperation were largely a question of the amount of toxæmia itself, in part pre-existent and in part superadded by the introduction of large amounts of an anæsthetic or analgesic. Hence the importance of giving as little as was consistent with the requirements of each case. Preliminary injection of morphine, atropine and other hypnotic narcotics was valuable, both because the nervous system was soothed, psychic shock diminished, and the amount of the general anæsthetic required was materially decreased. Special reference was made to operations involving severe shock—*e.g.*, prostatectomy, panhysterectomy, and intestinal stoppage was made, and in the last case Dr. Dudley Buxton advocated lavage and constant stomach drainage under intravenous ether infusion, and intravenous ether infusion was invaluable in cases in which considerable loss of blood occurred. The difficulty experienced in operations upon the upper abdomen due to rigidity of the recti was, the speaker believed, commonly due to partial asphyxia, the recti being muscles concerned in respiration, the causes and remedies of which he described. Many cases were suitable for a combined method, preliminary alkaloid injection with spinal anæsthetic or local analgesia, followed by general anæsthesia. The dangers which were very real of psychic shock had to be reckoned with whenever spinal and regional analgesia were employed alone, and these were accentuated in the case of the highly nervous and the neurasthenic.

Dr. G. A. H. Barton said the procedure which he found most generally useful in abdominal operations was (1) a preliminary alkaloidal injection; (2) a rapid induction by means of a little C.E. mixture and ethyl chloride on a Skinner's mask; (3) maintenance thereafter of anæsthesia by means of open ether given in a special apparatus, which he showed. Shock might be present before or develop during operation; since adopting the method above described he rarely experienced the latter event; morphia or ether did much to abolish it; warmth, position, saline infusion, and oxygen through alcohol were beneficial; pituitrin and adrenalin were useful, but must be used with caution as their exhibition was not devoid of danger in some circumstances. Strychnine he still considered valuable, but rather as a preventive. In the plethoric, muscular, and alcoholic, ethyl chloride was best avoided in the induction owing to its liability to cause abdominal rigidity in these types; where it occurred chloroform might have to be given, but he generally found oxygen and a light anæsthesia more useful. He spoke of the respiratory difficulties that frequently arose in the edentulous, and said that his practice when the patient had a complete set of upper and lower teeth on vulcanite plates was to leave them *in situ* during the operation. Where lung complications were severe inhalation anæsthesia should be abandoned and resort had to intraspinal analgesia or intravenous ether. On the whole he deprecated the administration of chloroform in abdominal operations, and particularly when sepsis was present. Septic toxæmia was a cause of degeneration of liver cells and acidosis and chloroform made the condition worse. Sepsis *plus* chloroform was, in his opinion, the cause of many of the deaths occurring from fatty acid poisoning a few days after operation in acute appendicitis and allied conditions.

Mr. Raymond Johnson referred especially to the difficulties met with in certain acute abdominal conditions in which the urgent need of immediate operation rendered any special preparation of the patient impossible. In the presence of toxæmia he entirely agreed with those who held that chloroform should be avoided and regarded the choice as lying between ether administered by the open method and spinal anæsthesia. With increasing experience he had become more and more impressed by the value of the latter, especially in such cases as acute appendicitis, particularly in young children, in whom the toxæmia was often profound and the mortality still high. Spinal anæsthesia was also particularly useful when the nature of the operation necessitated very complete relaxation of the abdominal muscles. He had found the method very valuable in operating for acute intussusception in young children. The closure of the abdominal incision in these cases was often very difficult if the muscular relaxation was incomplete, on account of the tendency of the omentum and intestine to protude. Mr. Johnson was specially interested in Dr. Buxton's remarks on the dangers resulting from great abdominal distension and vomiting in some cases of obstruction, and was of opinion that in some cases the safest course was to employ local or regional analgesia, and, in the first instance, merely drain a distended coil of gut. In prolonged abdominal operations, such as the combined abdominal and perineal method of removing the rectum, he thought the choice should lie between the inhalation and intravenous methods of administering ether, and that the decision should turn upon the general condition of the patient.

Finally, he referred to the occasional difficulty met with in closing vertical incisions in the upper region of the abdomen, and caused by the wide retraction of the divided edges of the posterior layer of the rectus sheath. He was sure that this difficulty was often not due to imperfect muscular relaxation, and suggested that the elasticity of the chest wall was an important element in causing the retraction of the divided aponeurotic layers.

Mr. J. D. Mortimer remarked that, as pointed out some years ago by MacEwen, a general anæsthesia even when pushed to a full extent did not abolish marked reflex disturbances during some surgical proceedings, particularly in neurotic, alcoholic and rickety subjects: such might occur in the total absence of preceding asphyxia. He had found a combination of light general anæsthesia with spinal analgesia valuable in such operations as prostatectomy and radical cure of hernia—complete relaxation being obtained and shock avoided, without the dangers of a deep narcosis on the one hand or of "psychic shock" on the other; which last if spinal analgesia were employed might be serious.

Dr. J. Leon Jona, of Melbourne, said he was pleased to hear Dr. Buxton advocate the warming of the operating table. This was a point on which surgeons could take a lesson from those who experimented on animals. The maintenance of the body temperature at its normal level during the course of the operation and afterwards would, he felt sure, reduce the amount of so-called "post-operative shock."

Another point mentioned by Dr. Buxton was the preliminary administration of morphia or some such drug, which certainly in dogs gave good results and necessitated the use of very much less ether or chloroform. There were a few other points, too, attention to which on the part of the surgeon would undoubtedly be of benefit to the patient, and so assist the anæthetist in his work, and these were gentleness in manipulation of abdominal contents, a little more respect for and better treatment of the parietal peritoneum, which in many abdominal operations was very much rubbed about by swabs, packs, etc., and celerity of action.

Dr. Copeland, of Toronto, Canada, speaking, said: Mr. President, I thank you for the invitation extended to visitors to take part in this discussion. It has given me a great deal of pleasure in listening to Dr. Dudley Buxton's able address. I may say that I am somewhat conversant with the way anæsthetics are given in both Canada and the United States, and that, in general, the methods used there are very similar to those described by the speaker. I am surprised that no mention has been made of nitrous oxide and oxygen anæsthesia, supplemented by morphine and atropine, and perhaps scopolamine. For long anæsthesia, especially in abdominal operations, it seems to be very little used in England. I have seen it given for over four hours in a very difficult abdominal case in the Montreal General Hospital with excellent results. In septic cases, such as an acute fulminating appendicitis, it is the inhalation anæsthetic *par excellence*, not causing the slightest degeneration in any of the solid organs, such as the liver and kidneys, or of the blood. If further relaxation be needed than it gives, an exceedingly small amount of ether added will secure it. Nitrous oxide and oxygen seems to me to be ideal in most cases as an introduction to ether.

Since coming to England, I have been surprised in seeing, in many hospitals, a most dangerous habit practised by men who ought to know better—namely, that of continually touching the cornea with their fingers to test the eye reflex. In Canada and the United States, it has practically been given up, and in some States of the Union it has been declared by the Courts to be malpractice, as corneal ulcers have resulted and sometimes blindness. It is the more inexcusable because unnecessary. The same information can be gained by touching the eyelashes. I should like to ask Dr. Dudley Buxton's opinion on this subject.

Crile has shown that one of the great factors entering into shock is the loss of carbon dioxide from the blood, caused by over-ventilation of the lungs by excessive breathing caused by pain and other reflex stimuli, which the speaker has mentioned. In the administration of nitrous oxide and oxygen a great deal of shock can readily be overcome, as Crile has shown, by restoring carbon dioxide to the blood, either by rebreathing, or better, by giving a definite amount of carbon dioxide. The patient also comes out of this anæsthetic with extreme rapidity, with a mind comparatively clear as I have lately had the experience of trying personally.

Dr. **Blumfeld** and Mr. **Hope** also spoke.

In replying Dr. **Dudley Buxton** reminded his hearers that he had been obliged to limit his remarks, for the time allotted was too short for so large a subject. The great value of Dr. Hornibrook's work lay in his proof that chloride of ethyl should be given by an open rather than by a rebreathing method. The corneal reflex was one which he believed should be seldom invoked; it was unnecessary, and the eye was often damaged by the finger. The use of nitrous oxide and oxygen in major surgery was, he believed, best restricted to its action in sequences such as before ether. In spite of Dr. Crile's and Dr. Peter's splendid work he was not convinced that the level of narcosis this mixture provided was convenient in the types of cases under consideration. Rapid resumption of consciousness was not commonly an advantage; he certainly believed that chloroform was undesirable in most cases of acute septic disease.

LIVERPOOL MEDICAL INSTITUTION.

Meeting held Thursday, November 7th, 1912.

President, Mr. Robert Jones, F.R.C.S., in the Chair.

Dr. C. **Rundle** read a short paper on

CONSIDERATION OF TEMPERATURE IN SELECTION OF CASES FOR TREATMENT BY TUBERCULIN.

Charts were shown by lantern screen demonstrating the reaction and control of temperature obtained by the administration of tuberculin. In those cases where temperature had been normal for a week or more the administration was begun with a dose of .00005 increased rapidly. The result was satisfactory. In another class of case with an evening rise of temperature to 99° F. or 101° F., many authorities discouraged the use of tuberculin, but Dr. Rundle thought that these were cases where the most brilliant empirical results were obtained.

In the cases where there was a superadded infection such as a streptococcal an autogenous vaccine was useful. Dr. Rundle had in one case been able to isolate such an organism from the blood and administer a vaccine. Tuberculin is of use when the secondary infection has been overcome, as shown by the temperature ceasing to oscillate. In cases where the temperature was from 101° F.—102° F., with perhaps a remission of a degree or so, but never coming to normal, the results of tuberculin were unfavourable.

Dr. Rundle remarked that he had used a preparation of formalin called hæmasepsin and found that it controlled the temperature after a marked reaction; on stopping the administration the temperature again rose, but could again be controlled. In this case it was found that the same quantity of normal saline produced a similar reaction and controlled the temperature, but after prolonged treatment and the use of eighty injections the case terminated fatally.

Dr. **Nathan Raw** read a paper on

THE TREATMENT OF TUBERCULOSIS WITH TUBERCULIN.

The paper was based on 640 cases which had been treated. Dr. Raw's impression was that in a great many cases permanent good was done, that where there was acute disease complicated by superadded infection, little could be expected. In all cases other means of treatment were also to be used if possible, such as prolonged open-air treatment, food, cod liver oil, and general hygiene. It was difficult to decide which cases would improve under the treatment, but the earlier a case was put under treatment the better. In the choice of the form of the remedy Dr. Raw used Koch's new tuberculin human and bovine, and he preferred a mild dosage. A temperature of 101° F or more was a contradiction to the use of tuberculin, So also was hæmoptysis on account of the local hyperæmia that was produced. In cases of virulent infection tuberculin was of little use. Some of the best results were obtained in gland infections, many of these cases were caused by the use of tuberculous milk, and were therefore of the bovine variety, and in these cases Dr. Raw considered there were better results from the use of human tuberculin. It was most important not to give tuberculin in any case where there was pent up pus or caseating material, all such deposits should be evacuated first, or otherwise the treatment would cause local reaction and a general diffusion of the disease. As little as possible should be done with the knife beyond incision of the part to liberate the pus.

Dr. Raw began treatment with a minimum dose of 1-10,000 mgm. If there was no reaction the next dose was given in a week, and slowly increased to 1-100 mgm. The patients usually had a feeling of well-being and the temperature became normal. Dr. Raw thought that with careful dosage undue reaction was due to errors in the *technique* of administration. In making a diagnosis he used Mors's ointment for children and Von Pirquet's test. Those were useful, but in an acute illness the positive reaction would not prove that the acute illness was due to tuberculosis; an old quiescent deposit would give the same reaction. It was not to be expected that in any apparently cured patient a permanent immunity had been secured.

In the discussion that followed Dr. T. R. **Bradshaw** congratulated Dr. Raw on the moderation with which he had stated his case for tuberculin treatment. Dr. Bradshaw had watched Sir A. Wright's early work with great interest and seen in his hands very striking results, but his further experience had not been so favourable; in many cases there was only improvement at first. Dr. Bradshaw doubted the value of Von Pirquet's test, as a reaction could be obtained in about 60 per cent. of normal subjects. If the reaction is a form of anaphylaxis it may be obtained during the whole of a susceptible individual's life, and would therefore be no guarantee of the presence of tubercular infection.

Sir **James Barr** had found that many cases did very well with tuberculin treatment, but there was one class where no improvement took place—in the young subject with bad indigestion and rapid pulse.

Dr. **Crace-Calvert** did not think it was necessary to use bovine tuberculin in the human variety of infection; he used bacillary emulsion, and had not seen severe reaction. He used smaller dosage than Dr. Raw—one hundred-thousandth mg., and increased gradually. He was sure that tuberculin was not going to revolutionise the treatment of tubercle, and he deprecated the publication of some statements intended for popular consumption, and quoted one in which it was stated that with tuberculin victory over the disease was never in doubt.

Dr. **Buchanan** pointed out that the reaction test was of small value from a diagnostic point of view, and its value was a diminishing one as life advanced from the age of three years. He had found that the more definite the reaction the more resistance there was to the tubercle bacillus. Dr. Buchanan thought we should be much helped if some definite standardisation of tuberculin could be arrived at so as to allow a real comparison of results obtained by various workers. He thought that in mixed infections tuberculin did little good. If a vaccine—even a stock vaccine—were used alternatively or together with tuberculin it would be an important advance. Dr. Buchanan thought we might safely push the dosage much farther than was usually done. In normal subjects 5 per cent. of leucocytes exhibited lobing, but in those with low immunity 80 per cent. of leucocytes were lobed. This observation could be made use of to indicate dosage, which should be pushed until the lobing came back to normal.

Professor **Ernest Glynn** did not think glandular tuberculosis was so often due to bovine infection as Dr. Raw supposed, and could not believe there was any advantage in treating bovine tuberculosis by human tuberculin and *vice versa*. The ideal would be to treat a subject by tuberculin from his own bacillus.

Dr. Moss, Dr. **Fairfield Thomas**, and Dr. **Stokes** also spoke.

In reply, Dr. **Rundle** said that he was aware that the Public Health Service of the United States had reported unfavourably on the use of tuberculin and that in France its use was much decried.

Dr. **Raw**, in reply, quoted the opinion of Von Pirquet himself that a positive reaction might be obtained, but was the result of a very early infection in childhood the forces being obsolescent. This was borne out by our common experience in the p.-m. room. The reaction was valuable in the negative sense, but even there an acute infection may overpower it. Dr. Raw quoted experiments in cattle which proved that they could be immunised by bovine, but not by human tuberculin.

SPECIAL REPORTS.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. ANNUAL MEETING AND THE INSURANCE ACT.

At a meeting of the Council of the Royal College of Surgeons of England on Thursday, November 14th, the President, Mr. Rickman J. Godlee, reported that the following resolutions will be moved at the Annual Meeting of Fellows and Members on Thursday, the 21st inst.:—

To be moved by Mr. H. Nelson Hardy:

That this Meeting of Fellows and Members approves and endorses the action of the Council taken during the past year in reference to the National Insurance Act, and agreeing with the Council's statement in its letter to the Insurance Commissioners, dated February 1st, that the administration of medical benefits cannot be carried out under the Act, as it at present stands, with due regard to the interests of the public and the welfare of the medical profession, trusts that in the coming year nothing will deter the Council from discharging its duty to its Fellows and Members as firmly and as faithfully as it has done in the year that is past.

To be moved by Sir Victor Horsley, F.R.S.:

That this twenty-eighth Annual Meeting of Fellows and Members again affirms the desirability of admitting Members to direct representation on the Council which, as now constituted, only represents those Members who also hold the Fellowship; and that it does so in order that the constitution of the Council of the Royal College of Surgeons of England shall be in keeping with modern ideas of true representation.

To be moved by Dr. W. G. Dickinson:

That this Meeting regrets that the Council has not called a special meeting of Fellows and Members to consider the National Insurance Act.

The President further reported the steps which he had taken in regard to a letter from the National Health Insurance Commissioners with reference to the position of Resident Medical Officers under the Insurance Act, and submitted the following copy of a letter which he had addressed to the Commissioners on the subject:—

Royal College of Surgeons,
Lincoln's Inn Fields, W.C.
October 17th, 1912

Sir,—The Council of the Royal College of Surgeons has not had the matter referred to in your letter of the 3rd instant under formal consideration, and do not propose to avail themselves of the opportunity afforded them of sending Representatives to give evidence before your Committee.

In acknowledging your letter I may, however, point out:

(*a*) That Resident Medical Officers in Hospitals naturally fall into two classes—first, those who receive small salaries or merely board and lodging, not because their services are not worth more, but because they discharge their duties for small payment in consideration of the advantage they gain from the instruction they receive in doing so; and, second, those who hold more or less permanent appointments and whose salaries exceed the Income Tax limit. Neither of these classes, therefore, appear to be employed persons under the meaning of the Act.

(*b*) That, in the case of sickness, it is the invariable custom for such officers to be offered treatment in the Hospital to which they are attached, an offer which is, in most cases, taken advantage of. It does not appear to be equitable to exact payment from both parties for that which is voluntarily given by one and for which the other has to pay nothing.

(*c*) It is practically certain that none of those who receive low salaries, and could, therefore, conceivably be held to be insurable under the Act, would continue such insurance after the completion of their short term of office. The result of including them would, therefore, be that the Hospitals would have to pay a perpetual tax in proportion to the number of these officers, who, in their turn, would have to pay for a few months for what under no circumstances could benefit them.

It must not be forgotten that Resident Medical Officers are most unlikely to join Approved Societies, and at the best, therefore, would only be Deposit Contributors.—I am, Sir, your obedient Servant,

(Signed) Rickman J. Godlee,
President.

The Secretary,
National Health Insurance Commission
(England), Buckingham Gate, London, S.W.

THE LOCAL GOVERNMENT BOARD REPORT. (*a*)

This Report includes the whole year 1911, and the first three months of 1912. On the whole the number of persons in receipt of Poor Law Relief shows a notable and satisfactory decrease, especially during the year 1911. This is largely attributable to the fact that since January 1st of that year, persons were no longer disqualified from becoming old age pensioners by reason of having received Poor Law relief at some time since January 1st, 1908.

March, 1912, shows a large increase of paupers—more than sixty-three thousand in England and Wales—over the corresponding month of the previous year. This was directly due to distress occasioned by the dispute in the coal trade, which occurred in that month. This rise lasted till the second week in April, when the number fell rapidly, but even at the end of May there was an excess, as compared with 1911, of nearly fourteen thousand, which must be largely traceable to the effects of the dispute.

A striking fact about this increase is that only a comparatvely small number of unions was seriously affected. Sixty-five per cent. of the increase was confined to thirty-two unions in England and Wales, and the metropolis was practically unaffected. This crisis was satisfactorily dealt with by means of an order containing provisions specially designed to cope with exceptional distress.

The problem of the administration of relief to the houseless poor of London has been difficult of solution, partly owing to the fact that there was no single metropolitan authority to deal with the matter. At the end of 1911 an Order was made transforming the whole of this department to the managers of the metropolitan asylum district. It is hoped that this departure will facilitate the distribution of the houseless poor among the several casual wards and by keeping them in close touch with the various charitable organisations will give them a chance of regaining an independent position.

Old-age pensions show a large increase, due to modifications in the statutory condition under which various classes of the population were rendered eligible. The total increase for the United Kingdom is 3.8 per cent.

In addition to the Board's Report copies of all orders and circulars issued, and of reports of the Board's general inspectors with regard to poor law administration are included.

(*a*) "Forty-first Annual Report of the Local Government Board, 1911-1912." Part I.—Administration of the Poor-law, the Unemployed Workmen Act, and the Old Age Pensions Act London: H.M. Stationery Office. 1912. Price 1s. 4d.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Nov. 16th, 1912.

At the Obstetrical and Gynæcological Section of the meeting of the Naturforscher und Aerzte, Hr. Edmund Falk, Berlin, reported on experiments he had made on the

ROENTGEN TREATMENT OF TUBERCULOUS PERITONITIS.

Making use of guinea-pigs for his experiments, he jected tubercle bacilli into the peritoneal cavity, setting up a local tuberculous peritonitis. The treatment consisted in opening the abdomen and then, whilst the abdomen was still open, applying the Röntgen rays. The tubes made use of were soft ones, the object being to set up a high degree of hyperæmia. As a matter of fact a greatly increased collection of lymphocytes within the peritoneal cavity was observable as long as a week after the application of the rays. For control purposes a series of the animals was simply operated on, the abdomen being opened, but without subsequent application of the X-rays, a second series was left without operation,—*i.e.*, in fact, without local treatment of any kind. The irradiation up to a full erythema dose was borne without any trouble, or injury. The result of the experiments on 22 animals was the following: In animals in whom the treatment was carried out at a stage when the liver, spleen or kidneys were also affected no recovery took place, but even then the infection was less than in the animals that had not been rayed at all. When the operation was carried out at a stage when the tuberculosis was limited to the peritoneum and the great omentum permanent recovery took place after X-raying in animals where no such recovery took place in animals that had had the abdomen opened, without the addition of the Röntgen treatment.

Hr. Frank, Cöln, gave an address on

SUBCUTANEOUS SYMPHYSIOTOMY.

He said that when properly indicated, he held symphysiotomy to be the most "blessed" operation in the whole domain of obstetrics. Asepsis in the wound, avoidance of free hæmorrhages were the chief things. Subcutaneous symphysiotomy came the nearest to the ideal. Free bleeding was avoided by drawing the clitoris and urethra with their vessels aside with the left hand. Asepsis was provided for by the use of a simple knife with which the symphysis was divided. First the lower half was cut through along with the crucial ligament, then the upper half from front to back. The incision was at once closed by a deep catgut suture. The speaker considered the following to be the important points: (1) That when the thrust was made the hip bones should be drawn apart, and that at the last moment of dividing they should be pressed together again. (2) That for some time after, by light pressure on the symphysis, a large hæmatoma would be obviated. (3) An exact aseptic dressing should be applied, strong enough to hold the pelvis firmly. (4) If there was a suspicion that the bladder was injured a permanent catheter should be left in it. The procedure should be made use of in primipara cases as little as possible.

He had performed the operation in 91 cases, some of which were in a febrile state. Of the multiparæ, of which there were 69, every mother and every child was saved. Of the primiparæ, 22 in number, one mother was lost and 7 children.

Hr. Leineweber read a paper on

FORCEPS DELIVERY.

He said the forceps might be the most useful instrument in midwifery, or they might be the most dangerous. They were dangerous inasmuch as they were applied too early, before the soft parts were sufficiently dilated. He warned his hearers, therefore, not to give way to the anxious and urgent solicitations of bystanders to end the labour, so long as the soft parts were not sufficiently dilated. Before this stage, before complete dilatation of the os uteri, it was a direct danger to put on the forceps. In the case of brow presentations, however, the attendant should not wait too long, otherwise that part would come too far forwards. No correction of the position should be undertaken with the forceps, as the back could not be rotated by them. The natural mechanism must be imitated with the forceps. We should not, as desired by Olshausen, sink the forceps so far that the forehead appeared under the symphysis, the blade should rather be raised as soon as the hair border appears underneath the symphysis so that this served as a "hypermochlion." If this was done operative delivery in brow presentations and in normal flattened pelvis was not difficult. In spite of this, however, the application of the forceps in brow cases required the greatest caution, especially in the bringing forward of the handles so as to avoid slipping and also too great a pressure on the perineum.

AUSTRIA.

Vienna, Nov. 16th, 1912.

STENOSIS OF THE PHARYNX.

At the Gesellschaft, Marschik showed a patient on whom he had operated for a stenotic condition of the fauces that had gone on shrinking for some time from a scleroma. A year ago he was treated in Chiari's clinic for a diffuse scleroma of the nose, pharynx and gums, and had been constantly under treatment since the end of 1910 by Chiari, who excochleated the nose and applied the Röntgen rays to the exposed infiltrations in pharynx and mouth, which acted beneficially on the external parts, but failed to improve the mouth and pharynx. Owing to this failure, the isthmus faucium grew narrower, notwithstanding the daily dilatation. At the beginning of the present year his condition was so bad that tracheotomy had to be performed to relieve the breathing, and gradually the swallowing got so bad that cachexia and inanition made it painfully evident that something else must be done to relieve the stricture of the pharynx. Accordingly a plastic operation was resolved on, and the whole of the fauces and soft tissue of the mouth dissected out, with a number of the back teeth. After thoroughly clearing away all the morbid growth, the next step was to find a flap to cover the denuded surface. This was selected from the left side of the neck commencing below the beard and ending with the base over the sterno-cleido mastoid. An opening was then made through the pharynx, as in the radical operation for the removal of the tonsils, and the flap carried into the mouth and fauces and fixed to the prevertable surface; with a circular opening in the flap the rest of the mouth was covered. All healed up with the exception of the opening through which feeding was conducted and allowed to granulate, as tampons were kept in the mouth to hold the covering in place. Finally the edges of the wound were freshened and a few stitches inserted to close the wound. Schrotter's catheter has been used since the operation, although the patient has been able to swallow perfectly and has put on 12 kilograms of weight since the operation.

PROTOZOA IN PEMPHIGUS CHRONICUS.

Lipschütz next related his late efforts to discover the real ætiology of pemphigus, as sometimes it has been attributed to nerve disease, at other times to bacteria, etc., leaving us in difficulty to say what it is really due to beyond a change in the cutaneous surface, leaving the internal intact, although some endogenic change must have taken place in some of the organs and the noxa carried by the bloodvessels to the skin. A similar dermotropism is met with in animal diseases, such as chicken-pox, the pocks of the sheep, and the foot-and-mouth disease. He examined the fluid from the vesicles of eleven patients cytologically on moist "Giemsa" colouring matter, and found ovoid bodies, some of them rather elongated with dark red nuclei, which appeared in some of the cells as if they were tied in bundles, in others two or three together. These were easily distinguished from the eosinophile granules.

From their general appearance Lipschütz has named the phenomenon "anaplasma liberum" for want of a better explanation, as they are easily distinguished by this from the cloudy appearance of the epithelium and leucocytes. This anaplasm liberum is not constantly found in pemphigus, as it could not be found in pemphigus vegetans, but is regularly present in pemphigus vulgaris and dermatitis herpetiformis.

Sternberg said that he had met with the same bodies in the spleen of a patient who had died with pemphigus. He also found similar bodies in the lymphatic glands, several of them having the form of protozoa, but he would not like to dogmatise on the subject without further investigation.

Wiedenfeld remarked that the different groups of pemphigus—vulgaris, circinnatus, foliaceous, acutus, and vegetans, were ætiologically different, and, indeed, could be separated clinically from one another, although the general appearance is similar. Pemphigus vulgaris and pemphigus foliaceous are easily transmissable and changeable. The other forms can be transmitted to the healthy skin by severe pressure and then applying the fluid of a vesicle to the injured surface, covering it with an impermeable stuff, which will sometimes produce a vesicle, though not always. Intracutaneous injections of the fluid, however, will produce a bulla. The ætiology of the first group is therefore toxic, the second bacterial.

HUNGARY.

Budapest, Nov. 16th, 1912.

At the recent meeting of the Budapest Royal Medical Society, Dr. A. Vas read a paper on

Duodenal Ulcers

In addition to the signs and symptoms generally emphasised, he called attention to the fact that in his ten operative cases gastric hypersecretion was a constant finding, and in a degree seldom encountered under other conditions, not even with gastric ulcer. Hypersecretion therefore suggests either gastric or duodenal ulcer, and when excessive speaks strongly for the latter. Three of his patients vomited about half a litre of extremely acid fluid from the fasting stomach and generally considerable acidity. Kemp in Copenhagen pointed out first that gastric motor insufficiency was also the rule with duodenal ulcers, and Vas's experience is the same. Two of the latter's patients had continuous retention, one considerable retention eight hours after an Ewald test meal, one after six hours, and one after five hours. Three of his six patients without continuous retention had pylorospasm, and all those with continuous retention. He has a record of pylorospasm in only four of his eighty-five patients with gastric ulcer, while it was manifest in seven of his ten patients with duodenal ulcer. In regard to treatment, he says that the same principles apply as to gastric ulcer, only that the hæmorrhage from a duodenal ulcer may be harder to control. Medical measures should be the routine treatment; operative treatment should be instituted only when they fail. He operated on account of stenosis in two cases, for repeated chronic bleeding in another, for results of pylorospasm in three, and for recurrence of symptoms after an at first apparently successful course of medical treatment in three cases. With duodenal ulcer there is less danger of cancer later than with gastric ulcer; cancer of the duodenum seems to be extremely rare.

On the By-effects of Salvarsan.

In Kolozsvár, Dr. Veress held a lecture on the above subject. He said that he used salvarsan in 370 cases, and all but 78 have been kept under supervision. The results of treatment do not indicate, he said, that the salvarsan has much more effectual action on the syphilitic process itself than the usual methods of treatment, while the harmlessness of the drug has by no means yet been demonstrated. In his own experience four of the patients presented serious disturbances on the part of the eyes and three others disturbances in the internal ear. The first patient was a robust girl of 18, and two months after the injection of salvarsan (which had been made two months after primary infection), she returned complaining of headache, vertigo and impaired vision in the left eye. As the Wassermann reaction was positive, she was given another injection of salvarsan, followed by mercury and iodine, but there has been no improvement in the condition, and the left optic nerve now also shows signs of neuritis. Incipient atrophy of the optic nerve was also discovered in another patient who had seemed to be much benefited by the injection of salvarsan after two years of the usual measures had proved inefficient to cure the malignant syphilis. The treatment had included thirty injections of cacodylate of soda and eighteen of corrosol. Three months after the injection of salvarsan incipient atrophy of the optic nerve on one side became manifest. In the fourth case the syphilis was of five months' standing when the salvarsan was injected, and three months later there were evidences of right peripheral choroiditis with central turbidity of the vitreous body humour. In two of the cases the Wassermann reaction had become negative. Finger and Wechselmann have also reported choroidites, pareses of the ocular muscles and iritis, as remarkable forms of recurrence of the syphilis a few weeks or months after the salvarsan injection. Fischer has reported in 1911 severe papulous iritis in four cases and neurochorioretinitis in another case from two to three months after the injection. All these are occurrences which are never observed under ordinary mercurial treatment in this early stage of syphilis. The same can be said of Finger's three cases, in which the acoustic nerve was affected (described in 1911). Dr. Veress's cases are quite similar to Finger's cases, inasmuch as in one case the infection of the acoustic nerve was complicated with nystagmus, vertigo, and typical tendency to fall, the hearing was intact, indicating that the vestibular nerve had been alone shut off in same way. The symptoms all passed away in a few days, but in the two other cases the trouble was evidently in the true nerve of hearing, and the deafness and vertigo have persisted unmodified to date. In these three patients the Wassermann reaction has been persistently negative, and the auditory disturbances did not develop until from nine weeks to nearly four months after the injection in the case in which they proved transient. Dr. Veress's experience shows that salvarsan has great symptomatic efficiency, but that it does not eradicate the disease.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

National Insurance Act.

As was forecasted last week, the decision of the Edinburgh and Leith Division of the British Medical Association was to refuse to work the Insurance Act on the Chancellor's terms. The meeting was very largely attended, and the decision was unanimously arrived at after a short discussion. A number of other Scottish divisions have also met to settle the line of action of their representatives, and with few exceptions find that the proposed terms are intolerable. With regard to sanatorium benefit, the trend of circumstances in Edinburgh is in the direction of placing tuberculosis under the Medical Officer of Health, and arrangements are being made to accommodate a larger number of patients than heretofore in the Edinburgh City Hospital. The actual arrangements as to the administration of sanatorium benefit are, however, far from complete, and the official organisation in Edinburgh cannot at present be compared in effectiveness and comprehensiveness with the voluntary organisation of which the Victoria Dispensary is the centre.

Anti-vivisectionists in Edinburgh.

Edinburgh has for a short season had to bear one of the gruesome exhibitions, in the shape of a "vivisection shop," displaying in its windows models of animals, apparatus used in vivisection, posters, etc., which are familiar in some parts of London and elsewhere, but which, hitherto, the northern capital has been spared.

The opening of the shop called forth a strongly worded protest signed by fourteen of the leaders of science here, including Sir William Turner, Sir Thomas Fraser, Professor Schäfer, Professor Lorrain Smith, and others. The letter was supported by remonstrances in the Press, and the shop was closed, but the promoters, evidently on the look out for trouble, hired new premises in Nicolson Street, close to the College of Surgeons, within a stone's throw of the University, almost in the heart of the Medical School. What was only to be anticipated took place. On Friday the shop was raided by about 500 students, who demolished the plate-glass windows, but failed to do any damage to the "exhibits," which had prudently been removed by the proprietors. The police had information that a disturbance was contemplated, and were present in force, so that the disturbers of the peace did not have things all their own way, and in the *mêlée* which ensued 23 arrests were made. The culprits were charged with malicious mischief and breach of the peace at the police court next morning, but trial of the charges was adjourned until Tuesday, the 19th inst. It is, of course, regrettable that an organised attack should be made on anyone, but little sympathy is expressed for the members of the Society which organised the scandalous exhibition. Their folly in opening a shop of this kind in or near a students' quarter is comparable to the conduct of an Orange lodge singing "Boyne Water" in a Catholic district—provocative in the extreme.

BELFAST.

The Insurance Act.

A meeting of the medical men of Belfast, convened by the Belfast Division of the British Medical Association, was held in the Medical Institute on Tuesday, November 12th. The chair was occupied by Dr. Gardner Robb, Chairman of the Division, and there was a crowded attendance. Various points connected with the working of the Act were discussed, and the course to be followed was decided. On the question as to whether payment for attendance on tuberculosis patients at home should be by capitation or by a scale of fees for work done, it was decided that pending the extension of medical benefits to Ireland, it should be by a scale of fees. A resolution condemning the action of the nineteen medical men who have not resigned their seats on the Advisory Committee was passed unanimously. Similarly a resolution was passed condemning the action of those medical members of the Local Insurance Committees who have retained their seats after being called upon to resign, such action tending to disunity in the profession, and loss of *esprit de corps*. An urgent appeal was made to all present to support the Guarantee Fund of the British Medical Association, and also to subscribe to the funds of the Conjoint Committee in Dublin. Up till now the Insurance authorities have not recognised the Local Medical Committee, and a resolution asking for recognition, specially in the arrangements for sanatorium work, was passed. The last and most important point discussed was as to what instructions should be given to the representative of the Division to guide him in his voting at the approaching representative meeting, and after full consideration it was unanimously resolved to instruct him to vote against giving medical services under the Act on the conditions at present proposed. Quite a number of Belfast practitioners have in their early days acted as assistants or locum tenens in English towns, specially in Lancashire and Yorkshire, and so are familiar with the conditions of contract practice, and have the warmest sympathy with the men whose whole living depends upon it. Among those who took part in the discussion were the Chairman, Sir John Byers, Drs. John Campbell, R. J. Johnstone, Davison (Ballymena), Rentoul (Lisburn), Thos. Davidson, A Burns, Cecil Shaw, A. B. Mitchell, and others.

The Sanatorium Grant.

An interesting discussion concerning the position of County Councils in relation to Peamount Sanatorium and the working of the Sanatorium benefit took place at the meeting of the Tyrone County Council last week. Mr. H. de F. Montgomery moved a resolution to rescind the decision of the County Council to engage three permanent beds in Peamount Sanatorium at a cost of £1 5s. each. He said that though he greatly disliked rescinding resolutions, he thought it his duty to propose this, as the statements made at the former meeting, when this arrangement was agreed to, were misleading. The County Council was under no obligation to provide beds, and the Insurance Committee could act independently of the County Council and send patients anywhere they liked. It had been made perfectly clear by Mr. Birrell's answers to questions, that if they entered into any contract with the owners of Peamount Sanatorium they would become liable for an unknown amount in excess of the figure mentioned in the contract. The statement that twenty-eight county councils had agreed to take beds at Peamount or Rossclare was not true, and he also found that the statement made that the Newcastle (Co. Wicklow) and Forster Green (Belfast) sanatoriums were not approved by the Local Government Boards was not true. He did not wish to be hard on the person who had made these statements, as he had taken service with a hard taskmaster and had to secure contributions from county councils as best he could. The County Council could not prevent the Insurance Committee sending patients where they liked, but they should appeal to them not to compromise themselves by sending patients to either Peamount or Rossclare if they could get beds at Newcastle or at the Forster Green sanatorium, or temporarily at the county hospital. Neither Peamount nor Rossclare was a desirable place.

Dr. Thompson (chairman of the Tyrone Medical Officers' Association) confirmed what Mr. Montgome had said about Peamount and Rossclare, and strongly recommended the County Council to er sanatorium with twenty-five or thirty beds, a appoint an experienced tuberculosis officer. He assure the Council that if such a scheme were ac they could rely on the help and assistance c entire medical profession in the county.

The Council agreed unanimously to rescin former arrangement, and to go into the whole qu again, Dr. Thompson being asked to place his s before a committee appointed to consider it. this meeting some difficulty has arisen concernir above-mentioned beds at Peamount. It appeai the secretary of the County Council did not infoi authorities at Peamount of the decision to engage beds, as notice had at once been given to rescin resolution, but Dr. Irwin, of the Women's Na Health Association, had informed them on hi responsibility, with the result that two of the be already occupied! The County Council auth say that, not having sent any official notificatior are clearly not responsible for payment.

The Maternity Nursing Scheme.

Further discussions have taken place on the Mat Nursing Scheme of the Women's National Association, but it continues to meet with approval. The Armagh guardians decided to ref the matter to a committee, and the Inishowen Donegal) guardians decided to let the matter drop.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

QUACKERY AND THE NEWSPAPERS.

To the Editor of The Medical Press and Circular.

Sir,—In view of the unchanging attitude which *The Times* has for many years assumed towards the quackery question, the leader headed "What is a Quack?" which appeared in a recent issue, can only be fitly characterised as amazing. This leader has been replied to in a letter by Sir Rickman Godlee. It clearly indicates the changed character of that newspaper's facts and arguments.

The article constitutes a new departure, due perhaps to the change in the proprietorship of *The Times*, which, after many rumours, seems now at last to have taken place. The article will certainly be accepted as a kind of apotheosis of unqualified practitioners and nostrum mongers, and we shall see at once a great boom in their trades. I have been, as you are aware, devoting attention to this question for some forty years. For what it is worth, I would now express my opinion that, lacking the support of what is best among the newspaper press, and in view of proceedings in the Law Courts and the General Medical Council during recent years, all chance of legislation to mitigate existing abuses has been destroyed. This may be bad for the profession, but will inflict incalculably greater harm upon the simple, suffering people who have most claim upon the guardianship of the State.

I am, Sir, yours truly,
Henry Sewill.

Redhill,
November 13th, 1912.

MALINGERING UNDER THE INSURANCE ACT.

To the Editor of The Medical Press and Circular.

Sir,—I wonder whether many of your readers have considered what is likely to be the effect of the Insurance Act with regard to malingering. Judging from what has occurred under the Acts which provide compensation to workmen after injury, the new law seems certain to create a situation extremely awkward for the medical practitioner engaged in working the Act and for the taxpayer who will be called upon to provide the funds. My card and description, which I enclose, will tell you that I have some claim to speak with authority, at any rate in the matter of the Workmen's Compensation and Employers' Liability Acts. A very considerable percentage of cases under these Acts are undoubtedly either cases of exaggerated claims or of pure shamming. Surgical injuries for the most part are easily recognisable; there is very little room for mistake or pretence in, for instance, such things as fractures, or dislocations, or herniæ, or injuries to the eyes. But even after reduction of a simple dislocation, and lapse of enough time for the joint to recover, I have seen a large number of cases in which I was tolerably certain, although perhaps unable to be positive, that the weakness and pain of which the patient complained, and which he asserted prevented him from working for weeks or months, were either entirely non-existent or grossly exaggerated. The difficulty of forming a positive diagnosis increases, of course, when the patient complains of illness, not injury; and these will be the awkward cases under the Insurance Act. It will be impossible for the practitioner in numerous instances to keep the cases under sufficiently close observation and to carry out a process of scientific examination needed to clear up the diagnosis. It will be an extremely uncomfortable or disastrous thing for him if he certify a really deserving case as an imposture; and the justifiable course in many instances will be to give the applicant the benefit of the doubt. If only a small percentage of malingering cases from among the 14,000,000 of insured persons occur annually it may mean an expenditure which has not been contemplated, and which may easily run into hundreds of thousands of pounds a year.

I am, Sir, yours truly,
A Lancashire Doctor.

Manchester,
November 9th, 1912.

PHTHISIS: A NEW REMEDY.

To the Editor of The Medical Press and Circular.

Sir,—Before thousands upon thousands are spent on sanatoria for consumptives, I should like a few thousands of my medical brethren to test my new discovery. I have been for the last few years using something which has never been thought of or tried before—viz., lysol. I have been using it in the early stages of tuberculosis, first in inunctions, then fine spray vapour inhalations, and now hypodermically, thus:—

Lysol (pure), one drachm.
Aq. distillat., two ounces.

Makes about a 3 per cent. solution.

One drachm of this to be injected under the skin around the chest once or twice daily, to be increased every three or four days by 1 per cent. until 15 per cent. is reached. Its effect will be soon seen. If it causes any slight uneasiness add to each ounce of solution when used, cocaine hg. $\frac{1}{8}$ gr. When 15 or 20 per cent. is injected at each time it should be once a day. I have never exceeded the latter, and each puncture should be an inch from the former one. One will have to use his own discretion as to what percentage he uses and its effect on the patient. Those who test it should give it a fair trial and make known the results through your columns. I think at least a three months' course would show up fully its wonderful effects.

I am, Sir, yours truly,
J. W. Lane, M.D., B.Ch.

Keyham, Devonport,
November 18th, 1912.

OBITUARY.

DR. MENZIES, EDINBURGH.

The death was announced on the 11th inst. of Dr. David Menzies, a well-known practitioner in Edinburgh. He graduated in 1876 and shortly thereafter became associated in practice with his father, who had one of the largest practices in Edinburgh. Dr. Menzies was of a retiring disposition and took little part in the actual work of any of the professional societies in Edinburgh. In his younger days he was an officer in the City Artillery, and as his chief recreations he enjoyed shooting and golf. As he succeeded to his father's practice, so is he now followed by his eldest son. Dr. Menzies had been ailing since the beginning of the year.

DR. GEORGE TAYLOR GUILD, DUNDEE.

The death occurred on the 15th inst., after a few days' illness, of Dr. Taylor Guild, at the comparatively early age of 44 years. Dr. Guild graduated at Edinburgh in the early nineties, and after a short experience of practice turned his attention to laryngology, which he studied in Marburg and Vienna. Thereafter he began the practice of his speciality in Dundee, where he rapidly acquired the confidence of his *confrères*, and was elected to the staff of the Dundee Infirmary. He was also lecturer on laryngology at the Dundee Medical School. Dr. Guild had under a quiet, reserved manner a great deal of natural humour and a kindly, generous disposition. His death is much regretted among his friends and acquaintances. He is survived by a widow and two children.

REVIEWS OF BOOKS.

PUERPERAL FEVER AND ALLIED INFECTIOUS DISEASES. (a)

The author endeavours to prove that puerperal infection is largely, if not entirely, due to contamination, directly or indirectly from suppurating wounds, and therefore that the high puerperal morbidity in manufacturing and mining districts is explained by the high accident rate in these districts. To support his thesis he gives a number of highly instructive tables of population, cases of puerperal fever, and the proportion of practitioners and midwives attending the cases. The bulk of the figures refer to Lancashire. Treating auto-infection as an extremely rare occurrence, he maintains that the person conducting the case is the real source of infection. Accidents are common in mining centres, and practitioners must be constantly dressing septic cases and so becoming involuntarily carriers of septic material. Unless very careful in their methods of disinfection they are liable to infect their obstetric cases. The high incidence of puerperal fever in such districts is strikingly brought out in some of the tables. The coal strike of 1912 is used to support his claims. During March and April there were hardly any accidents in mining districts, and the number of cases of puerperal fever dropped much below the average; while at the same time in other districts it remained the same. Hospital statistics have been greatly improved, but those of general practice are still very disheartening. This book can be warmly recommended as a thoughtful contribution to the solution of a serious problem.

(a) "Statistics of Puerperal Fever and Allied Infectious Diseases." By George Geddes, M.D., C.M. (Aber.). Pp. 119 Bristol: John Wright and Sons, Ltd. 1912. Price 6s. net.

THE CARE OF CHILDREN. (a)

We learn from the preface that this little book is intended to offer to newly qualified practitioners and to mothers and nurses some practical advice on the everyday care of children at the nursery age. It is seldom our pleasure to come across such a practical manual as this. Dr. Brockbank writes out of his own experience of infants, and his remarks throughout bear evidence of close and accurate observation of the infant's ways. He admits that teething does cause trouble even in healthy babies. He also states, what we have been endeavouring to impress on the profession for years past, that increase of weight may not necessarily be a true index of the healthy progress of the baby. There is no attempt made to give prescriptions for drugs, as these, he rightly states, concern the doctor only. Altogether this is a delightfully written book, and one which contains just the right sort of information for the practitioner who has had no practical experience of nursery management and the care of infants.

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[a] "Children: Their Care and Management." By E. M. Brockbank, M.D.Vict., F.R.C.P., Honorary Physician, Royal Infirmary, Manchester. London: Henry Frowde and Hodder and Stoughton. 1912.

Medical News in Brief.

The National Insurance Act.

At a meeting of the Joint Committee of the Royal Colleges of Physicians and Surgeons, the Society of Apothecaries, and the Medical Faculties of the Universities of England, held at the Royal College of Physicians last week, the following resolutions were passed:—

(1) "That in the opinion of this Committe the conditions set up by the Provisional Regulations of the Insurance Commissioners, dated October 1st, 1912, are of such a nature as to interfere injuriously with the right and proper independence of the medical profession, and with efficiency in the treatment of insured persons."

(2) "That medical practitioners, in matters concerning their professional conduct, ought not to be tried before a tribunal that is not professional, the decisions of which may have the most serious effect on their reputation and practice."

(3) "Seeing that the carrying out of the Provisional Regulations is left largely in the hands of the Local Insurance Committees, it would be unwise to agree to accept them (even if otherwise satisfactory), so long as the insured persons are represented upon these Committees by an overwhelming majority."

(4) "That attention should be called to the advisability of establishing tuberculosis centres in connection with those hospitals to which medical schools are attached."

At a meeting of the Executive Committee of the Imperial Medical Reform Union, held on the 7th inst., it was unanimously resolved:—"That the Executive Committee of the Imperial Medical Reform Union consider that the members of the profession can be recommended to accept service under the Insurance Act on the following conditions:—(1) That payment be made for actual services rendered and medicines supplied; (2) that the income limit of forty shillings a week be observed; (3) that the conditions of service be compatible with the honourable traditions and practice of the profession; and (4) that the whole question of remuneration be reconsidered at the end of three years."

Dublin Professors and Medical Benefits.

A meeting of the Dublin Division of the Leinster Branch of the British Medical Association was held last Thursday in the College of Physicians, Kildare Street. The object of the gathering was to consider a report of Council to Divisions and the representative body on the position of the profession in relation to the National Insurance Act, but with especial reference to the latest statement of the Chancellor of the Exchequer with regard to the increased remuneration for medical benefit. The attendance was large and representative, and after somewhat prolonged deliberation the following resolution was adopted:—

"That this Division is of opinion that the concessions granted, though considerable, are not yet such as to justify the medical profession in accepting service under the Act, as it now stands."

London (Royal Free Hospital) School of Medicine for Women.

The annual dinner of the Royal Free Hospital and School of Medicine for Women will be held at the Trocadero Restaurant, Piccadilly Circus, on Wednesday, December 11th, at 6.45 p.m. for 7.15 p.m., at which Mr. Stanley Boyd will take the chair. Applications for dinner tickets (7s. 6d.) should be sent to the Hon. Secretaries, Dr. Winifred Cullis, D.Sc., 8 Hunter Street, Brunswick Square, W.C., and Dr. Frederick Langmead, M.D., 53 Queen Anne Street, W., not later than Saturday, November 30th.

Sanatorium Destroyed.

The Queen's County Sanatorium for Consumptives, in the grounds of the County Infirmary at Maryborough, was totally destroyed by fire last Sunday. The outbreak is stated to have originated in a private apartment of a nurse, who was then absent at Mass in the parish church. The original cost of the erection and equipment of the sanatorium was about £1,000, and the damage is stated to be covered by insurance. The building was erected by public subscriptions, collected mainly through the exertions of Lady Coote, President of the Queen's County branch of the Women's National Health Association. The foundation stone was laid by Lady Coote on September 28th, 1910, and in the May following the Sanatorium was formally opened by Lady Aberdeen.

The Harveian Society of London—Annual Dinner.

The annual dinner of the Harveian Society of London was held at the Hotel Great Central on November 14th, the President, Dr. H. J. Macevoy, in the chair. After the usual loyal toasts, the President proposed the health of the Harveian Society, and Mr. D'Arcy Power proposed "The Kindred Societies," which was responded to by Mr. A. H. Tubby, President of the Hunterian Society. The toast of "The President" was proposed by Dr. Willcox, and Dr. Macevoy, in his reply, said he wished to acknowledge the assistance he had received from the secretaries, Dr. Carmalt Jones and Dr. Turtle, and proposed their healths. Between the toasts an excellent programme of music, arranged by Mr. Vivian Bennetts, was performed, including songs by Mr. Herbert Tracey, Mr. Wilden Knight, and Miss Maude Willby.

Domiciliary Treatment of Consumption.

A deputation from the Dublin Insurance Committee waited last Friday on the Irish Insurance Commissioners with reference to the question of domiciliary treatment of people who suffer from consumption. The deputation consisted of Dr. Rowlette, Mr. Kelly, Miss Gargan, and Dr. M'Walter.

The Countess of Aberdeen, who was not able to be be present, sent an apology.

The deputation pointed out to the Commissioners that they considered the Act useless as far as combatting tuberculosis was concerned, unless the Committee had power to give nourishment.

Mr. Glynn, Chief Commissioner, speaking for the Commissioners, stated that their difficulty was that it might lead to abuse if the Committee had the power to give nourishment; but if the Committee could arrange with the Dublin Corporation or some such body as that to give the domiciliary treatment, including nourishment, he thought it probable that such a scheme would be approved of. He thought the Corporation had that power under the Act.

Dr. Rowlette asked whether the Insurance Committee could not themselves make grants to institutions that would feed patients.

Mr. Glynn said he thought they had that power, but they (the Commissioners) were advised that there should be no separation of treatment—that is to say, that the same body should supply doctors, nurses, drugs and nourishment.

The Corporation of Glasgow and Treatment of Consumption.

The Health Committee of Glasgow Town Council have considered the question of the treatment of tuberculosis, and to give coherence to the scheme that has been prepared, recommend that the Medical Officer of Health, Dr. A. K. Chalmers, be formally appointed Administrative Tuberculosis Officer; that his assistant, Dr. A. MacGregor, be appointed Supervising Tuberculosis Officer, at a salary of £500; that five additional nurses be appointed to the various dispensaries; and that the Medical Officer of Health be authorised to appoint three assistant tuberculosis officers to take charge of various dispensaries. Two wards at Ruchill Hospital are to be used for a year for the treatment of consumption, sanction for that arrangement having been received from the Local Government Board.

Royal College of Surgeons of England.

At the Primary Fellowship Examination in Anatomy and Physiology, held on November 7th, 8th, 12th, 13th, 14th and 15th, 116 candidates presented themselves, of whom 22 per cent. were approved and 78 per cent. were rejected. Among the successful candidates were the following:—Benjamin Biggar, M.R.C.S., L.R.C.P., John B. Stanley, M.R.C.S., L.R.C.P., Andrew R. Bearn, M.D., B.Ch. Edin., Alec A. Lees, B.A.Cantab., John B. Haycraft, M.B., Ch.B.Edin., James C. Brash, M.A., B.Sc., M.B., Ch.B.Edin., Robert A. Kerr, M.B., B.Ch., B.A.O., Donald Watson, M.B., Ch.B.Edin., Vraspillai Gabriel, L.M.S., M.R.C.S., L.R.C.P., Geoffrey C. Linder, Abraham S. Liebson, B.A., Ernest C. Bradford, B.A. Cantab., Edwin D. Pullon, B.Sc., M.B., Ch.B.Edin., Martin W. K. Bird, B.A.Cantab., John O. Thomas, Dudley D. Pinnock, M.B., B.S.Melbourne, M.R.C.S., L.R.C.P., John W. Tonks, B.A.Cantab., M.R.C.S., L.R.C.P., Frederick J. Anderson, M.B., B.S.Lond., M.R.C.S., L.R.C.P., Matthew W. B. Oliver, M.A., M.B., B.C.Cantab., M.R.C.S., L.R.C.P., Philip S. Foster, M.B., Ch.B.Otago, M.R.C.S., L.R.C.P., Stanley E. V. Brown, M.B., Ch.B.Otago, M.R.C.S., L.R.C.P., Rhys T. Jones, B.Sc., Alan C. Perry, Sydney H. Hodges, Samuel W. M. Jones, and Gilbert C. Chubb, M.B., B.S., D.Sc.Lond., M.R.C.S., L.R.C.P.

New Members Admitted.—At an ordinary meeting of the Council of the Royal College of Surgeons on the 14th inst., with Sir Rickman J. Godlee, President, in the chair, the following candidates were admitted members of the College:—A. Ashmore, E. Bach, H. R. Bastard, G. E. Beaumont, B.A.Oxon., P. L. T. Bennett, L. G. Bourdillon, R. St. L. Brockman, B.A. Camb., R. G. Brown, E. N. Butler, B.A.Camb., L. T. Challenor, P. C. Cole, L. G. Crossmann, K. F. R. Davison, A. E. L. Devonald, G. R. Dobrasnain, S. Doraisamy, F. N. Doubleday, L.D.S.Eng., F. P. Duncan, W. J. I. Dwyer, T. L. Ellis, M. S. Esler, B. C. Ewens, B.A.Camb., E. G. Fisher, B.A.Camb., W. B. Foley, W. K. Fry, V. Gabriel, G. E. Genge-Andrews, D. M. Gibson, E. A. M. J. Goldie, R. S. Graham, J. Greene, M. J. Haffey, D. B. I. Hallett, W. J. Hart, B.A.Oxon., H. Harvey, L.D.S.Eng., H. J. B. Heelas, C. Helm, B.A.Camb., H. J. Hoby, R. J. Horton, D. E. J. S. Hughes, A. Jackson, B.A. Oxon., E. B. Jardine, D. D. B. Jay, B.A.Camb., H. W. Jones, R. A. Jones, L.S.A., S. Keith, C. Kennedy, W. J. T. Kimber, G. A. M. Leopold, T. P. Lewis, J. B. Lowe, W. C. D. Mails, B.A.Camb., L. A Martin, G. O. Maw, B.A.Camb., M. Mehta, R. H. Miller, G. W. Mitchell, B.A.Camb., S. G. Papadopoulos, S. G. Platts B.A.Camb., E. G. Reeve, W. R. Reynell, B.A. Oxon, J. F. G. Richards, I. Ridge-Jones, G. H. Roberts, W. Robinson, H. C. Rook, G. A. Russell, C. M. Ryley, R. Saravanamuttu, F. R. Scott, A. S. Seabrooke, B.A.Camb., H. N. Sealy, B.A.Camb., W. J. D. Smyth, B.A.Camb., L. B. Stringer, A. L. Sutcliffe, B.A.Camb., W. F. Thomson, B.A.Camb., H. E. Thorn, D. B. Truman, C. R. V. von Braun, J. R. Waddy, G. A. Walker, H. Walker, M. H. Watney, B.A.Camb., W. G. Watson, B.A.Camb., W. L. Webb, H. N. Webber, B.A.Camb., A. Wilson, E. Wordley, B.A.Camb., A. M. Zamora.

A. G. H. Lovell, M.B., L.R.C.P.Lond., was admitted a Fellow of the College.

The following candidates were admitted Licentiates in Dental Surgery:—H. H. Bond, E. L. Z. Fickling, W. W. Miron, E. V. B. Turner, and T. B. Tustian.

E. S. Marshall, L.R.C.P., M.R.C.S., St. Bartholomew's and London School of Tropical Medicine, was granted the Diploma in Tropical Medicine, which is issued jointly with the Royal College of Physicians.

The President reported that the Bradshaw Lecture would be delivered by Mr. C. Mansell-Moullin, F.R.C.S., on December 5th, and that the subject of the lecture would be "The Biology of Tumours."

National University of Ireland.—University College, Cork.

A meeting of the University for the Conferring of Degrees was held on Saturday, November 2nd. The following Degrees were conferred:—

M.E. Degree.—Frederick F. Burrowes, B.E., First Class Honours (*in absentia*); James H. de W. Waller, B.E., First Class Honours.

M.B., B.Ch., B.A.O. Degrees.—Patrick J. Walsh, Second Class Honours on whole examination; William F. O'Regan, Second Class Honours on whole examination; Maurice J. Roche, First Class Honours in Midwifery and Gynæcology; Stanley P. Stoker, Second Class Honours in Medicine.

Pass.—Daniel J. Barrett, Robert Harrington, John F. Hill, Thomas Hill, Denis Lynch, Patrick C. O'Donnell, Eileen M. O'Keeffe, John F. Rahilly, James J. Ryan.

M.D. Degree.—Pass: Joshua Keyms, B.A., M.B., B.Ch., B.A.O.

Diploma in Public Health.—Jeremiah Reidy, M.B., B.Ch., B.A.O. (*in absentia*).

Trinity College, Dublin.

The following candidates have passed the Intermediate Medical Examination, Part 1., Michaelmas Term, 1912:—Sydney W. Fisher, David R. Hennessy, Douglas C. Pim, Godfrey Bateman, Herbert Mitchell, Arthur G. Fisher, Edward Mannix, Francis A. McHugh, Edmond Robinson, Andrew W. P. Todd, George O. F. Alley, David S. Martin, Henry S. Campion, James E. Jameson.

Institutes of Medicine.—Frederick R. S. Shaw.

Final Medical Examination, Part II.—Medicine.—Walter Crane, Marjorie Chapman, William O. W. Ball, Arthur P. Draper, Henry B. F. Dixon, William Frier, Eric C. Crichton, Brian D. Crichton, Hubert T. Bates, Edwin S. Johnson, Georgina Revington, Leonard Shiel, William J. Stewart, Jane F. Colquhoun, Patrick Murphy, William P. Croker, Kenneth K. Drury, Frederick B. McCarter, Edwin F. O'Connor, Charles W. C. Myles, Hedley Boyers, and Robert Hemphill.

Conjoint Examinations in Ireland.

The following candidates have passed the examination by the Royal College of Physicians and the Royal College of Surgeons, November, 1912:—

Diploma in Public Health.—David Adams, F.R.C.S.I., James M. Bennett, L.S.E., L.R.C.P.I., Captain Leonard Bousfield, M.D.Cantab., R.A.M.C. (with honours), John Burke, L.R.C.P. and S.I., William H. Date, L.S.A., M.R.C.S., Marks Golding, L.R.C.P. and S.I., Miss Alice W. Maclean, M.B., Univ. Glas., Albert E. S. Martin, F.R.C.S.I., Alfred S. Millard, M.B., Univ. Edin., William M. Morison, L.R.C.P. and S.Edin., Robert M. Wishart, L.R.C.P. and S. Edin.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

Dr. P. G. (Berlin) is thanked for his letter, but we regret that our "Exhange List" is already so full that we cannot further add to it.

Mr. H. S. L. (Manchester).—Your first question may be answered by the reply that it is "Aspirin" under another designation. For reply to your second, we must refer you to "Secret Remedies," which can be purchased through any bookseller, and in which you will find an analytical report of those much advertised "Pink Pills" and "Doan's Backache Pills."

WORKMEN'S COMPENSATION ACT, 1906.

The Home Secretary asks us to give notice that in consequence of the resignation of Dr. Herbert Hawksworth, the appointment of Medical Referee under the Workmen's Compensation Act, 1906, for Llanfyllin and Welshpool County Courts will be vacant as from December 31st next. Applications for the post should be addressed to the Private Secretary, Home Office, London, and should reach him not later than December 11th, 1912.

Cuniculus.—We have made the necessary inquiries of two leading veterinarians, and find that nothing is known regarding rabbit virus. Virus for the destruction of rats, however, has been extensively used.

THE WALL AUTO-WHEEL.

One of the most interesting exhibits at the forthcoming Cycle Show at Olympia, November 25th to 30th, and one which will appeal strongly to medical men, is a novel form of motor bicycle known as the Wall Auto-wheel. It consists of a cleverly-designed, self-contained, auxiliary unit, in the shape of a one-wheel motor, of one horse-power, which is simply clamped by a connecting frame to the back hub spindle of an ordinary bicycle, no structural alterations of any kind being required. The running is quiet, the steering simple, and speeds of 6 to 20 miles can be obtained unaided along level roads. The machine is neat in appearance and it remains upright when at rest. The price is only 16 guineas. Medical men to whom this form of locomotion is a necessity or an attraction should certainly visit the stall of the International Auto-Wheel Co., Ltd., at Olympia next week.

Dr. T. L. S. (London, N.).—The recent researches of Nagelschmidt show that the alternating electric current may be modified in such a way that it affects the central nervous system in the same manner as Ledac's interrupted current, only the action is more powerful and more under control. It is unlikely, in the present state of our knowledge of electro-therapeutics, that such methods for producing sleep will become at all general.

"INSTINCT."

The play now running at the Duke of York's theatre has a great interest for the medical profession. Charles Frohman presents "Instinct," a play written by Henry Kistemaeckers, and translated for the English stage by Penryn Stanlaws. This play deals with the possibility of the professional instinct of a doctor prevailing over the personal feelings that may exist in his mind towards an individual. Dr. Mandover (played by C. Aubrey Smith) arrives at a point in his life where he has an opportunty of saving the life of a man whom he believes to be his wife's lover, or leaving him to bleed to death. The story surrouading the lives of Dr. Mandover and his wife (Miss Lilian Braithwaite) is told in three acts and supplies a very good evening's entertainment.

Meetings of the Societies, Lectures, &c.

Wednesday, November 20th.

Royal Society of Medicine (Section of the History of Medicine) (1 Wimpole Street, W.).—5 p.m.: Election of Officers and Council. Papers by Sir William Osler, Bart., F.R.S., Dr. Raymond Crawford, Mr. D'Arcy Power, Dr. Michael Foster. An Exhibition of Pictures showing the Evolution of the Microscope will be on view.

Brompton Hospital for Consumption.—4.30 p.m.: Lecture by Dr. Jex-Blake.

Thursday, November 21st

Royal Society (Burlington House, London, W.).—Mr. A. S. Russell, Mr. R. Rossi, Mr. J. A. Gray, Mr. J. C. Chapman, Mr. W. Wahl, Mr. R. E. Slade, Mr. F. D. Farrow, Mr. A. Russell.

Royal Society of Medicine (Section of Dermatology) (1 Wimpole Street, W.).—5 p.m.: Cases by Dr. J. H. Sequeira, Dr. A. Castellani, and others.

Royal Society of Medicine (Section of Neurology) (1 Wimpole Street, W.).—8 p.m.: Clinical Meeting: Cases by Dr. Turner, Dr. Batten, Dr. Buzzard, Dr. Fearnsides, and others.

Royal Society of Medicine (1 Wimpole Street, W.).—8.30 p.m.: Special Meeting. Discussion opened by Dr. H. G. Adamson.

Society of Members of the Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.).—3 p.m.: Annual General Meeting of the Fellows and Members. Sir Victor Horsley, F.R.C.S.Eng., will move this resolution: "That this Twenty-eighth Annual Meeting of Fellows and Members again affirms the desirability of admitting Members to direct representation on the Council of the College, which as now constituted only represents those Members who also hold the Fellowship; and that it does so in order that the constitution of the Council of the Royal College of Surgeons of England shall be in keeping with modern ideas of true representation," supported by Dr. J. Oldfield, Dr. Joseph Smith, J.P., President of the Society, and others. Dr. W. G. Dickinson (Hon. Sec. for fifteen years) will move: "That this Meeting regrets that the Council has not called a Special General Meeting of Fellows and Members to consider the National Insurance Act, 1911."

Harveian Society of London.—8.30 p.m.: Dr. A. M. Gossage, Mr. W. H. C. Greene.

Friday, November 22nd.

Royal Society of Medicine (Section for the Study of Diseases in Children) (1 Wimpole Street, W.).—4.30 p.m.: Cases by Dr. Bunch, Dr. J. W. Carr, Dr. Eric Pritchard, Mr. L. E. C. Norbury, Mr. H. A. T. Fairbank and others. Specimens by Dr. C. Paget Lapage and Dr. J. D. Rolleston. Paper by Dr. Leonard Guthrie.

Royal Society of Medicine (Section of Epidemiology) (1 Wimpole Street, W.).—8.30 p.m.: Papers by Dr. R. J. Ewart and Dr. F. G. Crookshank.

Monday, November 25th

Medical Society of London (11 Chandos Street, Cavendish Square, W.).—8 p.m.: Clinical Evening. Cases will be exhibited by Sir W. Watson Cheyne, Bt., C.B., F.R.S., Drs. Palmer, Poynton, and Messrs. Paul B. Roth, Wilmott Evans and others.

Appointments.

Brebner, C. S., M.D.Edin., D.P.H.Camb., Medical Officer of Health to the Chiswick Urban District Council.

Davies, G. Meredith, M.B., B.S.Lond., Resident Medical Officer at the British Lying-in Hospital.

Fothergill, W. E., M.D.Edin., Joint Lecturer in Obstetrics and Gynæcology in the University of Manchester.

Layton, T. B., F.R.C.S.Eng., Throat and Ear Surgeon to Guy's Hospital.

Walls, W. K., M.B.Lond., Lecturer in Clinical Obstetrics and Gynæcology in the University of Manchester.

Vacancies.

Monsall Fever Hospital, Manchester.—First Assistant Medical Officer. Salary £200 per annum, with board, lodgings, and washing. Applications to the Chairman of the Sanitary Committee, Public Health Office, Civic Buildings, 1 Mount Street, Manchester.

Coventry Education Committee.—Assistant School Medical Officer. Salary £300 per annum. Applications to Fredk. Horner, Secretary, Education Office, Coventry.

Royal City of Dublin Hospital.—Ophthalmic Hospital. Immediate application to Hon. Secretary of Medical Board. (See advt.)

Enniskilien Union.—Lisbellaw Dispensary District.—Medical Officer. Salary £90 a year, and £6 as Medical Officer of Health, together with registration and vaccination fees. Immediate application to R. Wilson, Clerk of the Union. (See advt.)

Births.

Barwell.—On Nov. 12th, at 55 Wimpole Street, the wife of Harold S. Barwell, F.R.C.S., of a son.

Davidson.—On Nov. 13th, the wife of Dr. Duncan Davidson, M.D., 15 Priory Row, Coventry, of a daughter.

Ede.—On Nov. 9th, at 5 College Yard, Worcester, the wife of W. E. Moore Ede, M.D., of a son.

Ewart.—On Nov. 15th, at the Broadgates, Gullane, N.B., the wife of Edward Ewart, M.D., of a son.

Glanville.—On Nov. 11th, at Emsworth, Hants, the wife of L. S. Howard Glanville, M.D., B.S., of a daughter.

Henderson.—On Nov. 13th, at The Red House, Amersham, Bucks, the wife of Dr. Hal. J. Henderson, of a son.

Mussen.—On Nov. 13th, at 13 Abercromby Square, Liverpool, the wife of Dr. A. A. Mussen, of a son.

Russell.—On Nov. 12th, at Osman House, Fortis Green, East Finchley, N., the wife of J. Dill Russell, B.S.Lond., F.R.C.S.Eng., of a son.

Marriages.

Benson—Wishaw.—On Nov. 11th, at Kilmersdon Parish Church, John B. Benson, F.R.C.S., of Circus House, Bath, to Enid, sixth daughter of Mr. and Mrs. James Wishaw, of Charlton House, Kilmersdon, and St. Petersburg.

Johnston—Honeyman.—On Nov. 12th, at St. George's Church, Hanover Square, Lt.-Colonel C. A. Johnston, I.M.S., son of the late William Johnston, of Madras, India, to Isabel Mary, eldest daughter of the late Dr. J. H. Honeyman, of Auckland, New Zealand, and Mrs. Bruce-Porter, of 6 Grosvenor Street.

Deaths.

Armstrong.—On Nov. 15th, at Somerset House, Chine Road, Bournemouth, George William Armstrong, Surgeon, late of Royal Hospital Schools, Greenwich, aged 72 years.

Atkinson.—On Nov. 17th, at Crewe, suddenly, Dr. James R. Atkinson.

Conolly.—On Nov. 11th, at Madeira, Beaumont Bowley Conolly, M.R.C.S., formerly Lieutenant of the 72nd Regiment, Duke of Albany's Own Highlanders (third son of the late Captain Conolly, of the Royal Engineers), the beloved husband of Mrs. Helen Conolly, of the "Quinta Pimenta," Funchal, Madeira, aged 70.

Durant.—On Nov. 15th, at Terrycot, Crouch Hill, N., Margaret, the beloved wife of James John Durant, Lt.-Colonel, I.M.S.

McLoughlin.—On Nov. 8th, at University College Hospital, Captain Wilfred Montagu McLoughlin, late R.A.M.C., youngest son of the late Lieutenant-Colonel John McLoughlin.

O'Connor.—On Nov. 15th, at Coolavin, Chatteris, Martin O'Connor, M.R.C.P.I., aged 74.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, NOVEMBER 27, 1912. No. 22.

NOTES AND COMMENTS.

Insurance Points.

THERE are certain points in the latest stage of the Insurance Act dispute which will be endorsed by most medical men. First and foremost, let us have the precise sum that is to be allotted free of all deductions—why should a man be paid for his professional services by a sum that has a fluctuating margin?—if so much money is not wanted for extra drugs and so on, it may go to the doctor. Is there any official service in the Kingdom remunerated in this unsatisfactory fashion? It is as if one were to say to a workman, Your wages have a margin of 2s. 6d. with which you can buy food, but 1s. 6d. of that sum may be wanted to pay for tools in another part of the workshop; if not so wanted, it will come to you. What employer would offer, or what workman would accept so meticulous an offer? Then there is mileage. Why should a man whose practice lies in a thinly populated district be compelled to present the Government with the time, labour, and cost of his journeys to outlying patients Mr. Lloyd George is probably beginning to realise more accurately the real volume and weight of medical opposition to the Act.

Dr. Esmonde's Scheme.

MEANWHILE, Dr. Esmonde, M.P., has published another scheme, asking medical men to sign the agreement for three years' service, on condition that the following terms are granted:—1. Capitation fee of 8s. 6d. (excluding tubercular and venereal disease) to cover visits and medicine (other than serum treatment), from 9 a.m. to 9 p.m. 2. Free choice of doctors where possible. 3. Limit of 1,500 patients. 4. Complaints to go to local committee of medical men; appeals, to a board of medical and of lay members. Dr. Esmonde says he has hundreds of answers from medical men willing to work the Act under his conditions. The income obtainable from 1,500 patients at 8s. 6d. per head is, roughly, £600 per annum. Dr. Esmonde's views are worth careful consideration, as he has gone through many years of the rough-and-tumble of general practice, but we fail to see that he has made any solid contribution towards solving the vexed problem. He has shown that there are some hundreds of medical men ready to act independently of their brethren, but, unhappily, that is no news. We welcome his attitude as genuine, however much we may hesitate in accepting his conclusion. It is with far other feelings, however, that we find a well-known specialist bewailing in the London newspapers the spirit of trades-unionism that pervades the medical profession. Whatever the issue of the present strife, the one great feature emerging from the noise and din of conflict is the collective enthusiasm—call it trades-unionism if you will—that has inspired and rendered possible the defence of our interests as a profession.

Alcohol at Sunrise.

THE Birmingham Licensing Committee have put forward a series of proposals with a view of advancing the sobriety of their town. Amongst other things, they suggest that the opening hour should be changed from 6 a.m. to 8.30 a.m. This seems to be a step of the right kind in practical temperance legislation. Who but a toper recovering from his overnight potations could want beer or spirits at six o'clock in the morning? By some sort of Nemesis the first beer drawn in the morning has long been known to cause plumbism owing to its action upon the lead pipes in which it has lain during the night. Postponing the hour would not, of course, lessen this particular risk. Nor would the alcohol swallowed at 8.30 a.m. be less fatal than that taken two hours and a half earlier, but it may be presumed there would be less opportunity of indulging at the later hour. But, of all drinking, that of the morning is the most harmful, and of all morning drinks that which is taken in the early hours on an empty stomach. No reasonable individual should want alcohol except at, say, dinner or supper, and for that there is no necessity. To drink before evening or between meals is a silly habit that steals away a man's strength both of body and of mind. We are glad to learn that the Birmingham magistrates approved the proposed change from 6 to 8.30 in the morning by a substantial majority.

Alcohol after Sunset.

THE same magistrates gave their unanimous approval of a second recommendation of the Licensing Committee to the effect that no woman or person under sixteen should be served with intoxicating liquor for consumption either on or off the premises before noon. The reasons for this proposal are fairly self-obvious. The magistrates, however, were not inclined to fall in with all the views of the Licensing Committee, for they rejected the crucial proposal that the closing hour should be changed from 11 until 10. There is a good deal to be said in favour of the proposal, as well as something on the other side. Broadly speaking, most people would be able to get all the alcohol they want before 10 o'clock, if such a rule were in force, just as now they do so by 11, or in London by midnight. The drinking habits of the nation have decreased greatly during the past generation, but it will probably require many years before liquor legislation can be reduced to a really reasonable and at the same time just and equitable basis. Other points, such as Sunday opening and grocers' licences, remain to be considered by the Birmingham magistrates.

Public Health and Medical Practitioners. OUR attention has been drawn to a query form which the Public Health Department of Dublin has recently addressed to medical practitioners who notify a case of infectious disease. The medical man is invited to express opinions, for the assistance of the medical officer of health, on the possible cause of the disease. He is asked to state, for instance, whether he considers it due to any article of food, such as milk or shellfish, or to bad drainage. Further, he is asked, "Do you wish any enquiry made which would throw light on the cause of the disease?" We do not know whether other health authorities adopt similar measures, but the whole procedure seems to us objectionable from sundry points of view. It is an attempt to throw on the private practitioner the responsibilities properly resting on the department of public health. It is the duty of the department to make full enquiries into the causes of an outbreak of illness, and that such enquiries should only be made at the wish of a private practitioner—as the above query suggests—is a relegation of duty. It should be clearly understood that when a practitioner has notified a case of infectious disease his duty to the public health authority is at an end. To ask him to answer a number of questions on a professional matter without proffering a fee is to expect him to do for nothing what the officers of the department of public health are paid for doing. Moreover, to furnish the information asked might very readily expose him to an action for damages. We advise medical men who may receive the document in question either to ignore it altogether, or to demand a suitable fee for supplying the information requested.

LEADING ARTICLES.

THE NATIONAL INSURANCE ACT AND THE MEDICAL PROFESSION.

THE latter part of last week witnessed the rejection of the terms offered by Government for the administration of medical benefits under the National Insurance Act. The importance of this step, so far as the medical profession of the United Kingdom is concerned, it would be difficult to overestimate. It amounts to a declaration of war. It registers a collective decision on the part of the medical profession, which is thereby committed to a policy that practically reaffirms the famous cardinal principles advanced at an earlier stage of the controversy. There is little need to go over the familiar ground: the income limit; the free choice of doctor; the administration of medical benefit; the method and amount of remuneration, and the rest. It is sufficient to know that the conditions offered by the Chancellor of the Exchequer, in spite of the various modifications which have been added to those of the original Bill, have been rejected by the great majority of the medical profession as represented by the Representative Meeting of the British Medical Association. The refusal of present conditions of service was carried by an overwhelming majority in the following terms :—

"That in the opinion of this Representative Meeting the Regulations issued by the Insurance Commissioners and the latest proposals of the Chancellor of the Exchequer are unworkable, derogatory to the profession, and a positive danger to national health. As a consequence, the medical profession declines to undertake service under the Act and Regulations as at present constituted."

That clinches the matter so far as the cardinal principles are concerned, but happily the door is not closed to further negotiations. It was resolved that the result of the meeting be communicated to the Chancellor of the Exchequer, with a suggestion for a conference upon the points which the representatives regarded as the reasonable demands of the medical profession. It is, of course, impossible to forecast the outcome of the struggle that has been forced upon medical men, but it is encouraging to find that they are able to defend their legitimate interests with an organisation and a loyalty that has so far proved equal to the occasion. Meanwhile it is interesting to observe the effect of what may be regarded as practically an ultimatum upon our friends the enemy. For this purpose we select an article from the *Daily News and Leader*, which throughout these negotiations has shown a bitterness against the medical profession which it is difficult to explain on any other ground than that of the virulence of political bigotry that can see one side only of its cherished projects. If the medical men find their practice suddenly turned topsy turvy and their livelihood jeopardised by a Radical Act of Parliament, any protest they may raise is attributed to political bias and the profession is acrimoniously flouted by "P. W. W.," who writes the parliamentary reports of the *Daily News and Leader*. Only last week he attributed the representatives' rejection to advantage taken of the recent Government defeat by a snap majority! The despair of chagrin could hardly hope for a more ingenious loophole, but despair seems to have run riot through the office of the journal in question about that period. The leading article of November 21st says that the fact that within less than two months the medical benefits must come into operation, a fact—according to the *Daily News and Leader*—gives the doctors a great strategic advantage. We have often insisted that the advantage was on Mr. Lloyd George's side, as he could spring upon the profession, without notice, some of those alternative plans paraded with so much jubilation by the same journal on former occasions. Then the "paucity of statistical information" is bewailed. "If the public could see before it in black and white," says the editor, "the financial position of the medical profession before and after the Act, and how much the profession will gain or lose by the Act, public opinion would intervene with decision on one side or other." That has the air of a sound proposition, and may be readily accepted. But what about a journal that admits the financial relations of a great profession are not understood, have never been authoritatively investigated, but are nevertheless to be at the mercy of a Government seeking to use the services of that profession in a way that profoundly affects the conditions of their economic existence? We must be thankful to the *Daily News and Leader* for one thing, namely, their derision of the three years' provisional trial of the proposed terms, and with that view we are entirely in accord. Much is written between the lines of the following passage:—"Neither the Government," writes the editor, "nor anybody else is inspired by any feeling of hostility towards the profession; but the Government is the guardian of the nation's purse and the nation's health. It cannot satisfy a monetary demand which it feels to be unjust. It cannot rivet upon the State the tyranny of the second strongest professional organisation of the country. In the unhappy event of agreement proving impossible, the Government should elaborate in leisure—so far as it is the business of Government—the system which common sense commends. That would look like a war with the medical profession—an undignified conflict for the State—and there would not be sufficient guarantee that enough of the best medical talent would be at the disposal of the State." This is all admirable, and marks a chastened frame of mind when contrasted with the threats of alternative systems to be worked by dissident doctors. The perplexity of the *Daily News and Leader* may be traced in the final sentence, which runs:—"The guiding principles for the Government are to take ample time, and to take a long view, and to commit themselves to nothing which a far-seeing statesmanship would not sanction." That sentiment is contrary to the proposition laid down in the earlier part of the article, whereby much of Mr. Lloyd George's dilemma is attributed to the time spent in negotiations. The real fault lies in the want of due enquiry into medical economics before the measure was laid before Parliament. The element of time becomes more than ever perplexing to the journalistic partisan when he reflects that in two years a general election is due, and that a momentary triumph over a powerful profession, obtained by the aid of a party bludgeon, might be dearly paid for at the polls, were the inherent social weight of the medical profession to be put to an ultimate test in that undesirable fashion.

CURRENT TOPICS.

The Royal College of Surgeons, England, and the Insurance Act.

There was a notable and satisfactory change in the usual scene at the annual meeting of the fellows and members of the Royal College of Surgeons, England, held on the 21st inst. In place of the recurring resolution, directed against an unresponsive council for refusing the representation of members on that body, the meeting was mainly concerned with the attitude of the College towards the National Insurance Act. It is, of course, desirable that a strong corporation such as that concerned should do its best to advance the interests of the medical profession by discussing matters of definite medico-political importance. At the same time it is not easy to see how their counsels are rendered clearer or stronger by the exclusion of members of the College. The present condition of affairs which prevents members from having a voice in their own government is a survival of class privilege that is grotesque in principle and mediæval in its injustice. It is to be hoped, therefore, that the fact of its lessened prominence at the meeting of last week marks no loss of zeal on the side of the reformers, but rather the rival attraction of certain intervening issues. Fellows and members would doubtless be well advised in the future to avail themselves of the annual opportunity afforded them by the council to bring forward for discussion the constitution of the College as well as medico-political questions in which the profession was closely involved. By this means pressure might be brought to bear upon the Government of the day in a manner which might prove fruitful. The resolution passed at the last meeting, endorsing the policy pursued by the council, was, so far as it went, satisfactory. But the resolution might, in our opinion, have gone further. The request should also have been made to the council to forward a copy of the resolution to the government official responsible for the introduction of the Insurance Act. This, had it been done, would have added to the value of the proceedings—and strengthened the position of the council in their dealings with the Government.

The Properties of *Catha Edulis.*

One of the distinguishing traits of national character, for the existence of which there would appear to be little reason save that of tradition, is the use of some stimulating beverage or drug. Whether it be tea, alcohol, bhang, or hashish, custom has enacted that the nervous system of the different tribes of the human race shall be periodically soothed and excited by one or other of these agents. The subject of stimulant-narcotics was dealt with last week by Professor Ralph Stockman, M.D., F.R.S.E., Professor of Materia Medica and Therapeutics in the University of Glasgow, in the opening address delivered before the Pharmaceutical Society of Great Britain in Edinburgh. He referred more particularly to the *Catha edulis*, a small shrub growing wild in Abyssinia and the neighbouring mountainous districts of East Africa. The use of an infusion of the leaves is said to be older than that of coffee, the taste being sweet and astringent, somewhat resembling liquorice in flavour. The beverage produces a sense of refreshment, wellbeing, and wakefulness, while fatigue or hunger are warded off or lessened. It is also said that those accustomed to its use have a feeling of weakness and uselessness if they are deprived of it. Previous attempts to separate the active principles of the leaves had been unsuccessful, but Professor Stockman has succeeded in separating three alkaloids in a state of purity to which he gave the names cathine, cathidine, and cathinine. He has also found in the leaves sugar, tannin, caoutchouc, wax, and a yellowish essential oil having a very pleasant odour and flavour. The first alkaloid has an action something like a combination of morphine and caffeine, the active principles of opium and tea. Cathinine has not the same drowsy or depressing effect on the brain, but acts more as a stimulant to the spinal cord. Cathidine acts as a muscle poison and a slight stimulant to the nervous system. Broadly speaking, the action of the leaves is essentially comparable to that of other vegetable products which are used by mankind as stimulant-narcotics. A full account of the actions of these alkaloids will, we understand, be published later.

Nervousness and its Cure.

OUR contemporary, *Musical News*, has recently offered some practical advice to performers and would-be performers upon the all-important subject of "nerves." Stage-fright is a common malady which affects not only actors and musicians, but also many other individuals who suffer considerable mental torture every time they appear in public from an exaggerated self-consciousness, leading to a morbid idea of failure. In the majority of cases, this pitiable state yields to one of greater confidence, or even of comparative ease, as soon as the performance has begun. Many eminent performers and public speakers have confessed to a feeling of extreme nervousness and dread immediately before their turn comes, but they obtain complete control over themselves directly they begin to play or speak. With some, however, the habit of self-confidence seems unable to be acquired, either from lack of mental training or from some inherent weakness of the nervous system, so that the talent of many really gifted persons never gets the chance to shine in public. To such, the *Musical News*, while appreciating the value, in certain cases, of hypnotism and suggestion, offers the gospel of auto-suggestion, diligently and daily practised, to the "complete exclusion of all the negative thought-poison of doubt, fear, or distrust." While agreeing in the main with the psychological teaching of the article in question, we should hardly consider it applicable to all cases of "nerves," so-called, some of which might, conceivably, be due to organic disease.

The Pollution of Rivers by Sewage.

THE eighth Report of the Royal Commission on Sewage Disposal was issued last week, dealing more especially with the important problem of the standards of purity to be applied to sewage and to sewage effluents discharging into streams and rivers, and the tests which should be applied to them. The Commissioners are of the opinion that the River Pollution Prevention Act of 1876 should be altered in such a manner as to allow local circumstances to be taken into account, and they conclude that the most trustworthy chemical index of recent sewage pollution of a river is afforded by the figure indicating the amount of ammonia present. But this constituent does not indicate the character of the pollution, for the determination of which another test is required, and the amount of the dissolved oxygen taken up in five days has been found by the Commissioners to furnish the most trustworthy chemical index of the actual state of a stream. They recommend that this amount should be adopted as a standard. With regard to the quantity of river water available for diluting a contaminating discharge, the Commissioners regard it as by far the most important of the various local conditions which should be taken into account in considering the question of standards, and they recommend the adoption of one general standard which, they state, can be attained by the complete systems of treatment that are available for sewage purification, and of special standards higher or lower than the general one, to meet exceptional cases. An effluent to comply with the general standard must not contain more than "three parts of suspended matters per 100,000, and with its suspended matter included must not take up more than two parts per 100,000 of dissolved oxygen in five days at 65° F. (18°.3 C.)"; this general standard to be prescribed by statute or by the order of the central authority, and to be subject to modification by the central authority after an interval of not less than ten years.

The Egregious Expert.

WHEN a man definitely decides to become a rigid specialist, he thinks that he is marching in the footsteps of natural advance. He compares himself with a cell, and finds that the more specialised the cells the more advanced the organism. As his work, experience and views become more and more narrow, the greater his self-appreciation is liable to be. He forgets one thing. No cell, nor group of cells, acts independently. They are all connected with others in the *corpus vile*. The man who lives and moves, and has his being only amongst experts of his own type, is merely an example of frenzied isolation. He thinks that nothing succeeds like excess, and nowadays he is succeeding. His day will not last, and even now it shows signs of waning—a truer reading of the proverb is that nothing recedes like success. Of course, no man can study medicine in its entirety—surgeons, physicians, eye-men, gynæcologists and so forth we must have. But the man who goes to Vienna for three months, and thence to Harley Street, and from that time forward confines his attention to bladders to the total exclusion of hearts, kidneys and other distant structures, is unnecessary. Let a man do some years' general practice, and unless his tastes are non-existent or unnaturally catholic, he will specialise automatically. To-day the specialist is largely a bearer of other men's responsibility or a scapegoat. His opinions should be treated gravely as such, and not as absolute, proven facts. He makes an excellent servant, but is a bad master.

Human Hair.

FOR some curious reason the medical profession has not devoted much attention to the study of costmetics, but an interest in human crinology is really a practical one, and not derogatory to the dignity of a physician. The loss of body hair marked a distinct stage in the advance of primitive man, and is a direct factor in the universality of his distribution. He is cooler in hot climates and can clothe himself according to the circumstances of his latitude. The Chinese and Japanese are the least hairy races, and their climates show the greatest and most rapid changes of temperature to be found. That facial hair is a protection is well known to our soldiers and pioneers of civilisation in the wilder parts of the earth. Women did not need it and so it disappeared, and now its persistence in man is merely a sign that women like it—a secondary sexual characteristic. Provided we keep our beards clean, to beard or not to beard may be left to our own taste or the delicacy of our larynx. As a matter of fact, it is not improbable that the approval of the opposite sex has still some say in bringing down our hairs in sorrow to the shave.

The Colouring Matter of Flour.

AN interesting report (Food Reports, No. 19) has just been submitted to the Local Government Board by Dr. G. W. Monier-Williams on the nature of the colouring matter of flour and its relation to processes of natural and artificial bleaching. The amount of pigment in flour is present only in a very small quantity, but it is shown that it is either carrotene, the colouring matter of the carrot, or a substance or mixture of substances so closely allied to carrotene that the absorption spectra are practically identical. The colour of carrotene may be discharged either by the oxygen of the air or by nitrogen peroxide, the two processes being quite distinct and resulting in the formation of different substances. It is concluded that the natural ageing of flour is due to a bleaching process by absorption of oxygen, whereas in the artificial bleaching by nitrogen peroxide certain substances, present in exceedingly minute amounts, are produced which are not formed during the natural ageing of flour. Therefore, artificially bleached flour is not quite the same thing as flour that has been naturally aged. Further experiments were undertaken to ascertain the amount of nitrate reacting substance present in flour and the degree to which this tends to increase on storage. Unbleached samples showed on the average an increase of nitrate from 0.4 to 1.2 parts $NaNO_3$ per million, while the bleached samples which already contained 1.6 parts per million showed no increase at all, except in one instance.

Eurhythmics.

The cultivation of graceful movements and gestures has not always been the main object of teachers of gymnastics, who, not unnaturally, believe that symmetry of form and uprightness of stature are more to be desired than mere beauty of gesture. According to the newest apostle of Greek ideals, M. Jacques Dalcroze, true grace of form and movement depends upon equilibrium and rhythm. The doctrine of co-ordination of brain and muscle, working in rhythmical harmony, has been studied by this professor of musical gymnastics for the last five years at his college at Hellerau, a garden city near Dresden. At an exhibition of his pupils' work, held at the Caxton Hall last week, it was quite obvious that his system was something more than a mere slavish imitation of the Hellenic gestures and attitudes in which individuality is, for the most part, completely ignored. The new method of eurhythmics seeks to educate the muscular system according to the laws of rhythm which, in conjunction with ear training, appear to lead to better results than when automatic movements are less studied. M. Dalcroze states that the English are naturally a rhythmical nation, and that English children respond most readily to his system. As long as such a method is not openly "boomed" as a new cure for nervous and other maladies, one can imagine nothing but good from its adoption.

PERSONAL.

H.M. the King in Council has nominated Dr. John Christie McVail, M.D., to be, for a period of five years from October 28th, a member of the General Council of Medical Education and Registration of the United Kingdom, for Scotland, and Dr. James Little, M.D., to be, for a further period of five years from November 26th, a member for Ireland.

The Lord Lieutenant of Ireland has appointed Sir Stewart Woodhouse, M.D., to be a Governor of the House of Industry Hospitals, Dublin.

Mr. F. A. Southam, F.R.C.S., has been elected a member of the Court of the Manchester University.

Mr. T. O. Graham, F.R.C.S.I., has been appointed Assistant in Throat Surgery to the Royal City of Dublin Hospital.

Dr. Harry Samuel has been appointed Clinical Assistant in the Skin Department of University College Hospital.

Mr. Bertram Arthur Lloyd, M.B., B.S.Lond., F.R.C.S., has been appointed Resident Medical Officer at Charing Cross Hospital.

Dr. George Jeffrey, M.D.Glasg., F.R.C.P.Edin., has been appointed Physician-Superintendent to the Bootham Park Private Mental Hospital, York.

Dr. W. M. Ettles will give a lantern demonstration on diseases of the eye at the meeting of the Hunterian Society at the London Institution, Finsbury Circus, at 9 p.m. to-night.

Mr. Stanley Boyd, M.S., F.R.C.S., will preside at the annual dinner of the Royal Free Hospital and London School of Medicine for Women, at the Trocadero Restaurant, Piccadilly, on December 11th.

Mr. E. Gerald Gauntlett, M.B., B.S.Lond., F.R.C.S., has been appointed Assistant Surgeon to the Paddington Green Children's Hospital and Senior Surgical Registrar and Tutor at King's College Hospital.

Professor H. E. Annett, whose research work for the Liverpool School of Tropical Medicine is known, has opened at Runcorn, his native place, a dispensary for the free treatment of poor consumptives by means of tuberculin.

Mr. C. Mansell Moullin, M.D., F.R.C.S., will deliver the Bradshaw Lecture in the Theatre of the Royal College of Surgeons of England, on Thursday, December 6th, at 5 p.m., on "The Biology of Tumours."

Capt. H. L. Howell, R.A.M.C., has been selected for appointment as a Specialist in the Prevention of Disease and placed in charge of the Brigade Headquarters Bacteriological Research Laboratory at Ahmednegar, Bombay Presidency.

The degree of D.Sc. in Bio-Chemistry has been conferred on Dr. Casimir Funk, Ph.D., an internal student of the Lister Institute of Preventive Medicine, for a thesis entitled, "A Chemical Investigation into the Cause of Beri-Beri," and other papers.

Mr. Austen Chamberlain has received £48,000 towards the £100,000 which he is raising for the London School of Tropical Medicine. He has been elected a Vice-President of the Corporation of the Seamen's Hospital, to which the school is attached.

Mr. P. W. Maxwell, F.R.C.S.I., has been appointed Surgeon to the Royal Victoria Eye and Ear Hospital, Dublin, in room of the late Mr. Arthur H. Benson, and Mr. L. Werner, F.R.C.S.I., has been appointed Junior Surgeon in place of Mr. Maxwell.

Mr. William S. Langworthy, M.R.C.S., L.R.C.P., of Yealmpton, Devon, was presented the other day with a silver spirit kettle, a walking-stick, and an illuminated address as a token of respect and esteem upon the occasion of his leaving the district after seventeen years of medical practice therein.

Mr. Edward George Betts, M.R.C.S., L.D.S., L.S.A., a former secretary and president of the Odontological Society, and a former hon. treasurer of the British Dental Association, who died on October 6th, left estate of the gross value of £43,465, of which the net personalty has been sworn at £41,306.

The following are the six selected candidates for the vacant medical officership of health for the City of London: Dr. A. M. Fraser, of Portsmouth; Dr. A. Greenwood, of Blackburn; Dr. W. J. Howarth, of the County of Kent; Dr. R. A. Lyster, of the County of Hants; Dr. J. F. Taylor, of Leyton; and Dr. W. M. Willoughby, senior assistant to the medical officer of the Port of London.

A CLINICAL LECTURE

ON

FEVER : ITS CAUSES AND TREATMENT.

By E. C. HORT, F.R.C.P.Ed.

Delivered at the Polyclinic, Chenies Street, W.C., on Thursday, November 7th, 1912.

In discussing fever it is well to define exactly in what sense we use the word. This has become necessary owing to the modern tendency to deprive the terms fever and pyrexia of the sense they used to hold, and to create thereby quite unnecessary confusion.

By fever in the early days of the clinical thermometer was simply meant a rise of internal body temperature above the normal range, because such rise was then, as it is now, often the most noticeable feature of the feverish state.

This use of the word has the sanction of custom and convenience, and, as a rule, leads to no misunderstanding.

The word fever, however, is also often used as an abbreviation for the state of fever, in which, although a rise of internal temperature above the normal range is an essential element, there are other factors to be considered. Amongst such factors are the familiar disturbances of the functions of the heart, lungs, skin and other organs that usually accompany any marked degree of fever.

This use of the word is also quite legitimate, and any case of doubt as to which of these two uses is implied can generally be settled by reference to the context.

The third use of the word fever is the generic one, by which we denote, with suitable prefix, different groups of infective diseases. We have, for example, the eruptive fevers, the bacterial fevers, the protozoal fevers, and so forth.

As is well known, it sometimes happens that an infective disease may run its course, even in fatal cases, without any rise of internal temperature above the normal range, although other indications of profound toxæmia may be present. For example, in some pneumococcal infections if the dose of poison be relatively large, or if resistance thereto be unusually feeble, the toxic agents associated with the disease may cause a marked fall of temperature below the normal range, or may even not affect it. In order to draw attention to this fact, some of our best writers on fever speak of a fever—meaning an infectious disease—in which there is no fever—meaning no rise of temperature. And in order to escape from the paradox that in a fever there may be no fever, they insist that the word must not be used to denote rise of temperature alone, and they, therefore, substitute the word pyrexia. We hear, in consequence of fevers that may be pyrexial or non-pyrexial. Apart from the obvious fact that without rise of internal temperature there can be no fever or state of fever, these writers forget that pyrexia means the state of fever, and is not an equivalent for fever in the sense of rise of temperature alone.

This is the confusion that has sprung up in recent text-books. It can, however, be readily avoided if we remember that pyrexia and the state of fever are interchangeable terms, both implying that though a rise of internal temperature above the normal range is the essential factor in the sum total of the feverish state, other factors must be considered. If we elect in any given case to apply the word fever to rise of temperature alone, it is always possible, and, in fact, customary, to state in such case the presence or absence of any or all of its well-known accompaniments.

We now come to the causes of fever.

By far the commonest cause of continued fever in man is the presence of pathogenic organisms. In all cases of bacterial or protozoan disease we have to consider therefore—

A. The primary cause of the fever, the nature and variety, that is, of the causal organism. This, of course, is mainly a bacteriological problem.

B. The nature and source of the actual body or bodies absorption of which is the essential cause of the fever. This is largely a chemico-physical problem which must be kept quite distinct from A.

C. The method of action of the actual fever producing substance on the mechanism of adjustment of heat production and loss, be such adjustment under nervous control, as we believe, or not. This is a physiological problem, and is the end point, so to speak, of the action of A followed by absorption of B, and is so far quite distinct from the problems presented by either A or B.

We are here concerned only with A and B and shall neglect C.

A. It is, as we have seen, very generally admitted that the primary cause of fever, as we meet it in practice, is in the majority of cases the presence of bacteria or protozoa in a pathogenic state. Slight degrees of fever of a fugitive nature may, of course, occur in perfectly healthy subjects as the result of exercise, baths and so forth, as was fully demonstrated by Davy in his Royal Society papers in 1863. Incidentally it may be said that study of the slighter degrees of fever is unsatisfactory if mouth or surface temperatures be taken. For this purpose, and in all experimental work, rectal observations are alone permissible if it is desired to obtain records of internal temperature. Other direct disturbances of nervous control of the balance between heat production and loss leading to fugitive fever are seen in some of the convulsions of children who are notoriously unstable in all their powers of adjustment. Mere muscular activity is a negligible cause of fever as hyperaction of all the muscles of the body may in animals be associated with profound fall of temperature in certain toxæmic conditions. In the fever associated with convulsions in children, and in other similar forms of fever, it may, perhaps, be unnecessary to invoke the presence of causal organisms. There is, however, a fairly large group of cases of fever in which, although it is at present impossible directly to implicate the action of micro-organisms, it is equally impossible to exclude the likelihood of their action. This is particularly the case since the work of Conradi and others on the ubiquity of organisms leading a saprophytic existence in the body organs. So long as no injury to these organs takes place fever may be absent because these organisms are not able to assume a pathogenic *rôle*. Once injury has occurred, however, the saprophytic may become pathogenic, and fever may ensue. In this class it is possible that many varieties of obscure fever will eventually range themselves. Such, perhaps, is the fever of malignant disease, which as a rule is not marked until autolytic changes in the growth are in full swing, apart, of course, from ulcerative lesions involving free surfaces. The same may also be true of many of the profound anæmias not primarily due to parasitic invasion, of hæmatomata, of simple fractures, of visceral hæmorrhage, and of atrophic and autolytic diseases of the liver. In all of these it is possible that the presence of dead cells afford a pabulum for micro-organisms and opportunities of conversion of saprophytic life into pathogenic activity. Here there is no necessity for invoking fresh infection from without in the ordinary sense of the word. In this category, also, probably comes the fever that we know as duct fever. Injury to bile ducts, by the partial or complete passage of calculi, injury to ureters by renal calculi or minute concretions, slight abrasions of urethra or ureter by perfectly sterile catheters, may afford, and I believe does afford, opportunities for conversion ot organisms leading a saprophytic existence in the ureter, bile duct, or other types of ducts, into organisms capable of producing marked or even serious fever. If this be true, it may be well to remember that the passage of even absolutely sterile instruments into ducts for purposes of diagnosis should not be undertaken unless absolutely necessary. In cases where bacterial disease already exists, for example in the kidney, it often happens that severe fever is set up by diagnostic passage of instruments. In such cases the surgeon is often wrongly accused of introducing imperfectly sterilised instruments, whereas the real explanation may be that he has inflicted some slight abrasion which he could not possibly avoid.

Next come the fevers associated with injury to the nervous system. In many of these the fever has been ascribed to injury of hypothetical heat centres. If the published records of these cases are carefully examined it is surprising in how few bacterial infection from wounds can be certainly excluded, quite apart from the possibility of conversion of saprophytic organisms into active fever producers in the absence of external wounds. In most of the experimental operations undertaken for the production of so-called nervous fever there is a surprising absence of control observations. In many of the operations the incision wounds were repeatedly sponged with dilute solutions of carbolic in water that we now know may have been itself strongly pyrogenetic. The injection of water or saline containing small quantities of pyrogen direct into the brain of animals produces high fever. These remarks must not be taken to mean that a true, nervous fever from injury of heat centres does not exist, only that the evidence so far produced is not very good. Finally, there are the so-called nervous fevers associated with the presence of cerebral tumours. And even in these it appears that fever is far commoner in the case of infective granulomata of the brain than in the case of non-specific tumours.

Next come the transient attacks of fever associated with the injection or ingestion of various substances which till recently were quoted far and wide as examples of fever that had no connection with the presence of micro-organisms. I refer especially to saline fever, transfusion fever, both as regards transfusion of blood and of saline, carbohydrate fever, anaphylactic fever, anæsthesia fever, salvarsan fever and protein fever. In each and all of these the particular substance injected has been credited with the possession of specific fever-producing properties. Recently, however, I have shown with my laboratory colleague Dr. Penfold, that all the experiments hitherto relied on in support of the existence of these different entities of fever must be rejected. We found, in short, that we could reproduce none of these fevers if we used as our medium of injection pure water or saline. The mistake apparently arose from the tendency that all water or saline has of picking up contamination with a heat stable filter passing substance that readily produces fever. The source and chemical nature of this elusive body are still quite unknown, though an essential factor in its production appears to be infection of the water or saline from the air. We have shown, however, that the presence of this contamination in water or saline holds no constant relation to the number of organisms capable of demonstration in these liquids before sterilisation. This form of fever in practice is seldom seious and is always fugitive. No treatment for it is required, as it can always be prevented by using water, in the preparation of saline, that has either been distilled immediately before use, or that has been stored in hermetically sealed flasks. In many operating theatres ordinary boiled tap water is used for the manufacture of saline. The amount of this fever-producing substance in London tap water is slight, but if large quantities are used, as in the treatment of surgical shock or collapse, a definite degree of fever may be produced, in spite of the fact that the water before boiling gave no organisms capable of cultivation. The use of tap water, therefore, is not to be recommended.

So far we have dealt only with the somewhat rarer forms of fever met with in practice, and have not touched on the fevers that are unquestionably due to the presence of bacteria or protozoa. For the most part the fevers we have mentioned are fugitive in nature, and the fever is, in many cases, not a serious affair. In most of them, however, it is almost impossible to exclude the action of micro-organisms either from direct introduction from without or by conversion from a non-pathogenic state into a pathogenic as the result of cell injury or death.

There remains the large group of diseases in which fever occurs as the result of recognised causal organisms or protozoa, including those in which the *materies morbi* is still unknown. Their name, of course, is legion, the exanthemata, coli infections, influenza, malaria, trypanosomiasis, and all the rest of them. In all of these the appropriate methods of discovering, where known, the causal organisms are sufficiently familiar. But before leaving this subject it may be well to insist that when all the ordinary tests have been carried out, it is still necessary to remember, in case of negative results, that in any serious case of continued fever in man bacteria or protozoa must still be looked for. In other words, it is necessary before falling back on such diagnoses as nervous fever, hysterical fever, carbohydrate fever and the like, to examine bacteriologically all the fluids of the body. And in certain cases this should be done, not once but many times. It has frequently happened to me to see cases in which a single bacteriological examination of the urine, for example, has been carried out with negative results. In such cases repeated examination has not seldom furnished the missing clue, especially where B. coli has been the offender. Isolated examinations, if the result is negative, are useless, because the appearance of organisms in the urine is often a question only of discharge. Not long ago I saw a case with intermittent attacks of high fever, which subsequently proved to have been caused by infection from a kidney stuffed with abscesses. In this case repeated examination of the urine was necessary before organisms could be cultivated with sufficient readiness to justify exploration. I have recently seen cases in which recurrent attacks of phlebitis associated with high fever proved eventually to be due to coli infection of a kidney containing calculi. In one such case there was no history of renal colic, and the urine was free from coli for months, and yet the attacks of infective phlebitis recurred. The treatment of such cases I will return to later.

Before passing on to the essential cause of fever in diseases due to the presence of micro-organisms, it is necessary to point out that, though clinically we have done our duty if we discover the causal organism in any given case, we are still quite in the dark as to how the fever arises. If, for example, we meet a case of pneumococcal infection, we know that if we can get rid of the pneumococcus, or put it out of action, we may be able to get rid of the fever. And, from the clinical standpoint, this is no doubt sufficient. From the pathological standpoint, however, it is not sufficient. We have at present not the remotest idea in what way the pneumococcus produces fever, nor do we know in what way any of the bacteria or protozoa cause fever.

And this brings me to B, the chemico-physical causes of fever, for want of a better name.

B. What is the essential cause of fever in diseases due to the presence of micro-organisms? This, of course, is more a pathological problem than a clinical, and I will not, therefore, do more than refer to a few points presented by the problem of fever as a whole. Stated briefly, the pivot of the problem is this. Granting, as we must, that without the presence of the B. typhosus, for example, typhoid iniection cannot take place, what is the fever due to? Is it due to absorption of fever-producing substances derived from the dead bacillus typhosus, or is it due to absorption of fever-producing bodies set free from the cells of the infected subject as a result of the action of the living bacillus on those cells? Or, thirdly, is it due to the direct action of the living bacillus on nerve cells? Once we can answer these questions we are a long way toward answering some of the clinical problems presented by fever. At present, we can only say we do not know. Until quite recently it has been universally assumed that the pyrogen, or substance, that is, which causes fever by upsetting the nervous mechanism of adjustment between heat production and loss, is derived from the dead bodies of the invading micro-organism. Evidence in support of this belief was supposed to be afforded by experimental observations in man and on animals in which fever undoubtedly followed the injection of certain organisms after their destruction by heat or chloroform. These experiments had apparently never been called in question till this summer. Further, it was assumed that because injection of certain organisms after their destruction was followed by fever, this was necessarily true of all organisms. During this summer, however, I published the results of several thousand experiments carried out in my laboratory in the Lister Institute by myself and Dr. Penfold, and showed that the evidence hitherto relied on to prove the cause of fever in infective disease no longer exists. We showed, in fact, that if precaution be taken to suspend certain varieties of killed micro-organisms in pure saline or water before injection no fever whatever resulted. The fallacy I have already referred to that is due to the use of contaminated water or saline was, in short, the cause, in some instances, of the belief in pyrogenetic properties of certain varieties of bacteria or cocci. This was, for example, the case in certain strains of staphylococcus aureus, B. diphtheriæ, B. anthracis, and others. We also showed that dead organisms, such as B. typhosus and B. coli, which unquestionably do produce fever immediately after injection, even when suspended in pure water, apparently only do so because they have picked up from the laboratory media on which they have undergone cultivation a fever-producing substance derived from such media. In other words, it seems that the pyrogenetic properties of dead organisms is merely due to contamination derived from the media employed for growth. The work is not yet complete, but we believe we have in these experiments obtained good evidence that the fever of infective diseases is not due to absorption of bacterial pyrogen derived from the dead organisms, but is due to the action of the living organisms on the tissues of the host. A full account of some of these experiments is to be found in the current number of the *Journal of Hygiene.*

The immediate practical importance of these observations on the practice of injecting dead bacterial vaccines is obvious. Many vaccines, for example, of B. typhosus, B. coli, and others, whether employed for prophylactic or therapeutic purposes, are, of course, known to produce in a short time marked fever with all its unpleasant accompaniments. As we showed in July last at a meeting of the Pathological Society in Newcastle it is quite possible so to treat these vaccines that they are deprived of this power of producing fever. Once it can be definitely established, and this we are now working at, that contamination of these vaccines by this fever-producing substance derived from the laboratory media, is of no advantage to the subject receiving the injection, it will become necessary to eliminate from all vaccines this undesirable effect. On the other hand, it may prove to be the case that much of the benefit derived from the use of dead vaccines is in reality due to injection of this contamination. In this case it becomes very necessary to recast our ideas as to the method of action of dead vaccines in the treatment of serious infective conditions, and to determine the real value, from the immunising standpoint, of purified vaccines freed from this contamination. There are other interesting points raised by these experiments which for the moment appear to be of more theoretical than clinical value, and we will, therefore, pass on to the treatment of fever.

The treatment of fever is of two kinds—palliative and specific.

The palliative treatment of fever is to a large extent merely the treatment of the symptoms of the feverish state. Apart from diet, rest, baths, adequate air supply, and so forth, reliance in the past has been chiefly placed on drugs—mainly of coal tar origin. To-day we realise that the use of phenacetin, antipyrin, aspirin, salicin, and similar preparations is of very limited value in the treatment of fever. At present we do not even know whether fever is a conservative process or not. Until we do possess this knowledge it is an open question whether the use of these drugs is justifiable, except as a temporary expedient to relieve distress. Their continued use may, on the other hand, do considerable harm, even apart from their depressant effects. In the palliative treatment of hyperpyrexia there are other better methods to employ, such as baths and sponging. In the treatment, however, of hyperpyrexia I have sometimes obtained great benefit by the rectal injection of large quantities of hot saline. The immediate effect is to cause a still higher degree of fever. This, however, in cases that have not been left too long, is quickly followed by a fall of temperature of several degrees, the procedure, in fact, producing a crisis. In a case I saw not long ago of hyperpyrexia in measles, the effect was most gratifying.

The specific treatment of fever, on the other hand, resolves itself into a question of the specific treatment of the condition that gives rise to fever. Since continued fever in man is in the majority of cases due to infection, specific treatment of fever becomes a question mainly of its prevention. In other words, we cannot at present treat fever, but can only hope to prevent its appearance or continuance by successful prevention or treatment of the infection on which it depends. This we do in one of two ways. We either attempt to remove, or, failing this, to destroy or neutralise the action of the causal organisms, or we attempt to effect relative or absolute immunity to their action.

The chief methods in use to-day, other than surgical, for the specific treatment of fever are those offered by chemotherapy, serum therapy, and vaccine therapy.

The successes obtained in specific chemotherapy by quinine, salvarsan, and antimony in the treatment of malaria, syphilis, and the trypanosomiases, suggest that there is a great future for this branch of specific treatment. How far the colloidal chemists will be able to provide us with colloidal metals in a relatively non-toxic state, for example, we ought soon to know, if we may judge from the large number of workers engaged on this subject.

A second specific method of preventing or treating fever still on its trial is vaccine therapy. Of this there are two forms fundamentally different. In this country the injection of emulsions of dead organisms for protective and therapeutic purposes—as regards fever—is having an extensive trial. In the treatment of continued fever there is a widespread belief in their efficacy for this purpose which cannot be set aside. Personally, I have not yet come across a single case of serious continued fever where the treatment can be credited with success. I have, however, seen many cases where, after extensive trial, its failure was admitted. This, however, may be a very exceptional experience. Quite apart, however, from any therapeutic value that dead vaccines may have in continued fever, there is no gainsaying the fact that toxic symptoms, not necessarily serious, do sometimes follow their injection. And the shortness of the time in these cases between injection and increase of the fever, leaves no doubt as to the relation between cause and effect. As we have already seen, as soon as we are sure that the injection of adventitious pyrogen derived from the medium of growth is of no value, it will become very necessary to use only vaccines that have been freed from this contamination. If, on the other hand, it prove to be an advantage to use contaminated vaccines, it then becomes necessary to determine what specific value can be properly ascribed to vaccines that are not thus contaminated, so far, that is, as the treatment or prevention of fever is concerned.

The second form of vaccine therapy consists in the injection of living organisms, and sometimes of dead, that have been sensitised by incubation with immune serums. The method was originally introduced, on an extensive scale, by Sclavo for the prevention of anthrax. It has since then been taken up by Metchnikoff and Besredka, and modified by them and other workers. So far it has been mainly used, though not entirely, for prophylactic purposes. The great point claimed for the method appears to be that living vaccines can be used with impunity, and with better immunising results, provided certain precautions are taken, if the organisms before injection are sensitised with immune serums. It is claimed that by this method the vaccines are to a large extent detoxicated, both as regards local and general reactions, though it does not appear that the pyrogen contamination from the media of growth is necessarily removed. It is much too early for general use of these vaccines, but it is possible that the method may entirely replace the somewhat haphazard method of dead vaccine therapy at present under trial in this country.

In the meanwhile the method opens up a wide field of development of the somewhat neglected science of immune serum therapy. Hitherto we have believed that the scope of immune serums was restricted to the provision of passively immunising agents. For instance, the unrivalled success of anti-diphtheritic serum is generally believed to be merely a question of passive immunisation. If, however, it be true that living vaccine becomes a better agent in the production of active immunity if it be first sensitised with immune serum, it is possible that in some diseases an anti-bacterial serum may be of greater value than an antitoxic, though in a different sense to that usually held. It is, in fact, legitimate to suggest, though so far as I know the suggestion is a novel one, that the real value of good immune serums (apart from diphtheria) may lie, not in their antitoxic or bactericidal properties so much as in their ability to sensitise in vivo the potential vaccines the infected body already holds. In other words, immune serum therapy may prove to have great values hitherto undreamt of. In such event the immediate practical problem will be the determination of the kind of antigen to use in the preparation of such serums. The whole question is one of fascinating interest, and there for the present we must leave it.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Herbert French, M.A., M.D. Oxon., F.R.C.P.Lond., Assistant Physician to Guy's Hospital, &c. Subject: "Some Therapeutic Points."*

ORIGINAL PAPERS.

RADIUM IN GYNÆCOLOGICAL CONDITIONS.

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IN COLLABORATION WITH
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Radium has recently been used with varying success in certain gynæcological conditions, and in some of these the results indicate the possibility that it may in future prove of still greater value.

Among the conditions which are reported to have been favourably influenced by the application of radium are included cancer of the uterus, cancer of the vagina, fibroma of the uterus, metritis, chronic urethritis, inflammation of Bartholin's glands, and pruritus of the vulva. Jacobs (1) also recommends radium treatment for membranous dysmenorrhœa, chronic pelvic cellulitis, chronic salpingitis, and epithelioma of the vulva, but Finzi's (2) experience indicates that in the latter condition its beneficial results are problematical, and he is of opinion that in some of the cases which have come under his observation the growth of the neoplasm, instead of being favourably influenced, has even been accelerated by radiation.

The histological changes, which have been demonstrated in malignant growths after intense radiation, are in the first place invasion of the neoplasm by the leucocytes, with accentuation of the normal cell changes. This is followed by disappearance of some of the cancer cells, which are replaced by fibrous stroma, and finally by fibrous tissue. There is also cell degeneration, especially in the superficial portion of the growth, and proliferation of the endothelium of the blood-vessels. Wickham and Degrais (3) are of opinion that these changes are of a curative nature, and that there is invariably a definite proportion between the intensity of the radiation and the number of cells destroyed. Histological investigations have demonstrated that these degenerative and destructive changes extend to a depth of nine centimetres from the surface.

An important consideration in regard to radium therapy, as applied to malignant disease, is the fact that both the Röntgen and radium rays have been shown to exert an elective influence on cancerous growths, the superiority of radium in this respect being due to its action on the deeper tissues by means of the gamma rays. This action results in degeneration and destruction of the neoplastic cells only, the normal cells remaining unaffected, and it varies enormously in different varieties of tumours. It is accentuated by increased intensity of radiation, and the use of larger quantities of radium, so that a growth which has proved refractory to small doses for a prolonged period may possibly yield within a comparatively short time to larger doses. The action of the penetrating radium rays is considerably more selective than that of the Röntgen rays, so that they are much more likely to influence deep-seated growths. In this connection it should be borne in mind that, in addition to this selective action varying in different varieties of neoplasm, it may also vary to a certain extent in the same type of growth in different individuals, so that they will not require applications of the same degree of intensity.

Cancer of the Uterus.—The first reference in literature to the employment of radium in the treatment of cancer of the uterus is in a paper published in 1905 by Dr. Abbé, of New York, who has since done a considerable amount of work in this connection.

With the improved instrumental *technique* which we now have at our command, by means of which radium tubes can be introduced directly into the body of the uterus, a large and suitable field for utilising the therapeutic qualities of radium has been opened up.

The apparatus which has been recently designed is very adaptable to this region, and as it can be fixed and kept in position for many hours it has the great advantage of allowing of long-continued application of the rays. These technical improvements, and the fact that clinical experience has now shown us the physical qualities of the rays and the quantities of radium which are necessary if we desire to obtain certain definite results, render the treatment of the greatest value in uterine conditions, and indicate the possibility of its taking a still more important position in the future. The small size and convenient shape of the apparatus allows of complete saturation of a uterine cancer with the rays, which are therefore superior to the X-rays in this connection.

The experience of Nammacher, Rubens-DuVal, Finzi, Wickham and others shows that radium has already been of great service in disease of the uterus, and that it is a most useful adjunct to surgery in this region, as well as in other parts of the body. In inoperable cases it often facilitates surgery by reducing the thickness of the neoplastic tissues and diminishing the malignity of the field of operation, and from a prophylactic point of view most satisfactory results have been obtained from post-operative radiation of cicatrices. Even if operation is not rendered possible, in the majority of cases of malignant disease of the uterus radium treatment is beneficial to a certain extent in relieving intolerable pain and diminishing discharge. In some cases the "cross fire" method, namely, a combination of internal and external applications, is of great service. Owing to the facility with which radium tubes can be introduced into the body of the uterus, uterine conditions are very suitable for treatment, and in addition to this the analgesic, hæmostatic and decongestive properties of the rays are adapted to meet the requirements in the treatment of malignant disease of this organ. It is advisable to select apparatus by means of which applications of the greatest possible intensity can be given, in order to avoid the disadvantage of too long-continued applications.

J. H. McLeod (4) states that in his experience the destructive action of radium in relation to the cancer cells has not apparently been so marked in cancer of the uterus as in more superficial conditions, but he thinks that this peculiarity may very possibly be explained by the difficulty of access to uterine growths, of watching and controlling the radium applications, and also by the great rapidity of malignant proliferation.

In this connection we would report three inoperable cases where the use of radium has been of distinct benefit. The first of these cases was reported by us in January, 1911 (5), and the improvement has been continued.

Case 1. A patient, æt. 53, referred by Dr. Tuttle, of Tweed, Ontario, first noticed a bloody uterine discharge in January, 1910. She did not consult a physician until June. The cervix was cauterised, but serious hæmorrhage recurred, and in July she underwent an operation at the hands of a leading gynæcologist in Toronto, when the uterus was curetted, and the cervix amputated. This was all that was done, as, in the surgeon's opinion, the left ureter and bladder were involved, and hysterectomy would not be justified. A very grave prognosis was given.

On August 5th she consulted regarding radium treatment. The discharge, pain, and irritability of the bladder had continued. Dr. F. A. Cleland, Gynæcologist at St. Michael's Hospital, Toronto, was called in consultation, as it was felt that the treatment should be surgical, if possible.

The condition at that date, as reported by Dr. Cleland, was as follows: "On August 15th, in the vault of the vagina, and where the cervix had been removed, was a raw, bleeding, granular surface, about two inches in diameter, extending into the vaginal wall. The left side was more involved than the right, and in order to remove the growth completely, an extensive dissection would have been required, and probably the removal of the left ureter.

"The uterus was fixed on the left side, and examination by bi-manual method caused a good deal of pain. The body of the uterus was not enlarged.

"In view of the extensive operation which would have been necessary, and the uncertainty of complete removal, radium treatment was advised."

This patient has been under observation for over two years. Her general health has much improved, and she has increased in weight. At intervals, prolonged exposures to the radium rays, from tubes placed against the cervix, have been given. Local examination at present (September, 1912) would indicate that there has been no extension of the disease. The uterus is, if anything, more movable than at first, and there are no bladder nor bowel symptoms. The ulcerated area of the cervix has decreased, but not entirely, and now presents a small central ulcerated area, surrounded by firm fibrous tissue. There is no odour to the slight discharge.

Case 2. First came under observation on June 15th, 1911. The disease was considerably more advanced than the first case. She had been curetted as a palliative measure, but had had considerable bleeding since. Dr. Cleland was consulted as to the possibility of surgical treatment. He found the uterus fixed to the surrounding parts, and considerable extension on to the bladder. The cervix presented a large area of ulceration, which bled readily. Encouraged by the results obtained in Case 1, we decided to try radium. Almost from the first the bleeding stopped and the patient put on weight. She is able to be about, and enjoys a comfortable life. She has been continuously under observation since. There is an occasional slight bleeding, and some abdominal pain, no doubt caused by the adhesions to the surrounding organs. Dr. Cleland has also seen her from time to time, but has not advised further curettage or other operative measures, as the radium treatment seems to be holding the disease process well in check.

Case 3. Patient, 52 years of age, referred by Dr. Brandon, of North Bay. Came under observation March 3rd, 1912. She suffered from a cancer of the cervix, and had been curetted some weeks before. She was having almost continuous hæmorrhages, was confined to bed, and the condition was regarded as so desperate that her husband was told by a surgeon in consultation that nothing could be done but wait for the end. When seen the condition was most assuredly a grave one. She was weak and exhausted from constant loss of blood. On examination the cervix was quite excavated, forming a crateriform ulcer, and the growth had extended on to the vaginal walls. Dr. F. A. Cleland, who was called in consultation, agreed as to the inoperable character of the case, and advised that radium treatment should be tried. She was given a very heavy exposure, much more than either of the previous cases. The bleeding soon ceased, and has only reappeared occasionally since. She put on weight, and was soon able to be about each day. The area of ulceration has steadily lessened, and all macroscopical evidence of cancerous growth in the vaginal walls has disappeared.

Chronic Urethritis.—Although the results of radium treatment in this condition have so far been very uncertain, it has been beneficial in several cases, and it is therefore justifiable to undertake it when the usual therapeutic measures have been tried without success.

Pruritis and Vulvar Vegetations.—Good results have been obtained from the use of radium in such cases, chiefly owing to its analgesic properties. Wickham reports the case of a woman aged 62, who suffered from vulvar and perineal pruritus of ten years' standing. After two series of applications the patient had long intervals of comparative comfort, and the pruritis gradually disappeared altogether.

Lupus of the Vulva.—Improvement has also been reported in cases of obstinate lupus of the vulva, and in chronic ulceration, presumably due to blenorrhagia.

Dr. Wickham strongly emphasises the imperative necessity of the association of radium treatment with surgery whenever possible, and that it should not be regarded as an independent form of treatment, but merely as an adjunct to surgery. Up to the present it has been chiefly employed in inoperable cases, but it has an extensive field of usefulness in the pre-malignant stage and in post-operative prophylactic treatment, and it has been found of great service to surgery in rendering operable tumours which are inoperable or practically inoperable.

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A SKETCH OF THE DEVELOPMENT OF THERAPEUTIC IMMUNISATION (*a*)

By W. BOXWELL, M.D., F.R.C.P.I.,
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IMMUNITY to disease can come about in a variety of ways. Some are said to be naturally immune to many diseases to which others are prone, and live through many an epidemic, say of mumps or measles without ever becoming infected. Others become immune through having had the disease. One attack of smallpox usually makes a man immune for life.

Artificial immunity to a particular disease lasting for a variable time can be brought about by injecting the microbes of that disease in an enfeebled form into the blood of previously susceptible people or animals, the injection acting as a stimulus to the formation within the body of protective anti-bodies. This is called active immunity, while the blood serum of an animal so protected—such as a horse—may be injected into a

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(*a*) An Inaugural Address to the Students of the Meath Hospital at the opening of the Session 1912-13.

human being, and confer upon him, as it were, a ready-made immunity. Here the horse serum, charged with protective anti-bodies, acts as an antidote, neutralising the microbial poisons exactly as an alkali will neutralise an acid. The immunity so established is called passive immunity.

It is obvious that the first and second forms of immunity are not available for practical purposes. The development and extension of the third and fourth have acted like a lode in attracting the best brains in the world of pathology since Pasteur.

How it was that Pasteur, a pure chemist, came to be the first and greatest bacteriologist is another story. Let those who do not know go and read about him. It is sufficient here to remind you that Pasteur may be said to have *discovered* microbes, and that was less than sixty years ago. When the wine and beer turned sour he found a foreign fungus had fermented them. When milk turned sour he found a microbe in the pail. When the silkworms withered he found a parasite within them. When the chickens died of cholera he found a bacillus at work, and when the cattle died he found the long chains and whorls of anthrax in their blood. When the women died of childbed fever he found the streptococcus; and when the Alsatian peasant child, Joseph Meister, bitten by a rabid dog, was brought to him, he inferred again a microbic origin for rabies and cured him with a vaccine.

You notice that Pasteur used the very word *vaccin,* because though no microbe had then, nor has since, been found for "small-pox," he felt that the immunity he was able to confer with his injections of enfeebled or attenuated microbes must be the same as Jenner had conferred against small-pox by inoculation of the children with material taken from the disease of calves, known as cowpox; for that in fact is what we do in the process of ordinary vaccination.

Vaccinia or cowpox is either small-pox modified by passage through a calf, or an independent, but closely allied, affection. So closely allied is it that an attack of it, or what comes to the same thing, inoculation of the fluid taken from the cowpox vesicles into a human being protects him from catching small-pox. Hence the word "vaccination." In the light of our present knowledge it is safe to assume that in vaccination we are planting the germs of disease in an attenuated form upon the child, the result of which is to produce a temporary local sore, the vaccination pock or vesicle, and at the same time a lasting constitutional change, which protects the child from catching either cowpox or small-pox for seven years or more.

It may not be out of place to remark that when surgical cleanliness is observed, and "calf lymph" only used, the inoculation of any disease other than "cowpox" is impossible. The infections dreaded by those who know no better are those associated with the presence of the tubercle bacillus and the spirochæta pallida. Now the latter organism cannot be engrafted upon cattle. They are naturally immune to it, and places like the Pasteur and Jenner Institutes see to it that the calves used are absolutely free from tubercle or any other disease. Where there is nothing to be feared from an overdose of tuberculin, the test is practically infallible. Ordinary minor infections are prevented by the glycerine in which the vaccine lymph is carried.

But to return to Pasteur. It was while working with cultures of the microbe of chicken cholera that he accidentally stumbled upon artificial immunity. What he was trying to demonstrate at the time was that some bacilli which he had found swarming in the bodies of chickens dying from a cholera-like disease were actually the cause of the disease, because if these bacilli were sprinkled on the bread with which the chickens were fed they invariably sickened and died of chicken cholera.

One day on returning from an unusually long holiday he repeated his experiment; but for the first time the experiment, in a sense, failed. The chickens did not take the disease. The hitherto deadly culture had failed to kill. He tried again with a fresh culture from a recently fatal case, and still these chickens would not die, whereas this fresh culture killed fresh chickens every time.

What had happened? The old culture "attenuated" by age, had lost its death-dealing powers, and had acquired instead the priceless property of conveying immunity. Further investigation showed that the degree of virulence of the microbe varied directly with the age of the culture, and that the sub- or daughter-cultures "bred true," through successive generations, not only in the matter of virulence, but in the quality of the immunity they might be made to confer.

Here then, at last (to quote Mr. Stephen Paget), "was the living agent of disease—the thing itself, the real offender—corked up in a test tube," no longer a nameless horror, but in the words of Roux' famous paper, "a thing that we could turn this way and that—stuff so plastic that a man could work upon it and fashion it to his liking."

The import of these observations was that microbes, as a source of disease, were not a blind force like lightning, but like the current from a battery, could be controlled at will, could be made to kill outright, as in the fulminating types of disease, or dealt out with a fractional part of their original strength and even made to become—next to the *vis medicatrix naturæ* itself—the most potent curative force known to science. With these historic discoveries of Pasteur the science of therapeutic immunisation was born.

Jenner had immunised with his vaccine, it is true; but at that date—1796—the connection between bacteria and disease was not dreamt of, and his method of conveying cowpox to prevent small-pox was only one step removed from conveying the disease itself.

It was not quite a blind shot—for he had tradition to guide him—and it hit the mark; but it seemed to be an isolated incident leading nowhere; and for nearly a hundred years no progress was made.

Pasteur's discovery was the first link in a chain, and it was not long (1881) before he unearthed the whole mystery of the prevailing cattle plague—anthrax—and working on the same lines, cured some and protected others by a vaccine. In 1885 he protected a child against rabies by using a vaccine made from the spinal cord of a rabbit, the virulence having been lowered by "drying" instead of by mere lapse of time. This was the great personal triumph of Pasteur's life, and the story of it is splendidly told in his biography—a book which every educated man and woman ought to read.

It is not my purpose to weary you with a bald list of the discoveries which resulted directly from Pasteur's work. An example taken here and there will be enough.

In 1881 Koch had discovered the bacillus of tuberculosis, and showed it to English doctors at the International Medical Congress in London. In 1890 he announced to the world that in tuberculin, another vaccine, he had found the remedy. In that very year came the news that animals could be immunised against diphtheria and tetanus just as against anthrax and rabies, and the discovery of a cure for tuberculosis was confidently expected.

When Koch's announcement came, no one who had followed the march of events doubted the value of his method. Was he not Pasteur's most distinguished pupil? Had he not made discoveries of first-class importance himself? It was he who had found the tubercle bacillus, and his work on cholera was a monument to his genius. The term vaccine was a word to conjure with. And yet his vaccine failed miserably, and apparently hopelessly. Some men who tried it said it actually killed their patients. The hopes of the consumptive were dashed to the ground. As Mr. Paget says: "The failure of tuberculin was one of the world's tragedies," and vaccine treatment for tuberculosis came to a standstill.

There was no doubt, however, about the value of the anti-toxin serum against diphtheria and tetanus or "lock-jaw." In both cases, if given before severe symptoms developed—that is in the first two or three days—the effect was magical and protection absolute.

With the most brilliant minds the world over now focussed upon the whole question of immunity, fresh successes in the field of preventive medicine were soon forthcoming.; the natural histories of malaria, yellow fever, Malta fever, and plague read like fairy tales. Protection could be given against cholera, typhoid fever, dysentery and plague by means of vaccines; yet tuberculosis lagged, and still lags, behind.

It was natural that men should want to know the reason why; and countless experiments have been made into the nature of immunity, and although some light has been thrown on the process, it still abides in the main an inscrutable mystery.

In 1883 Metchnikoff had propounded his well-known phagocytic theory of immunity, according to which the white cells in the blood were said to engulf and destroy the microbes.

This theory was followed by a humoral theory. Here the fluid constituents of the blood are supposed to play a more important part in destroying the microbes, while the blood cells only clear away their dead and mutilated bodies.

All sorts of views were held—many more or less fantastic—but, amid a conflict of opinion, Wright, a countryman of our own, stepped into the field with one prime factor established—namely, that, whatever other protective elements might or might not exist in the blood, there was one, which he called "opsonin," and which was called into being in variable quantity under the stimulus of microbic infection.

This substance acts upon the live microbes—or, as he put it, prepares them as food for the blood cells—so that more microbes are engulfed than otherwise would be the case. He established the fact that when the dead bodies of these very microbes were injected into the blood in suitable doses, the amount of this substance was markedly increased. There followed a sort of high tide of "opsonin" in the blood, and during its flow many bacteria were killed and engulfed. This tide ebbs and flows, and during the ebb the microbes make headway. He found, moreover, that this tide might be controlled to a great extent; that the ebb or flow depended upon the *size* of the dose and the *interval* between the injections, and he invented a method for determining the correct dose and the time at which it should be given to ensure the best result. He learnt, too, by experience, that if the dose was given at the wrong time, or was too large, the tide fell often to an alarming or even fatal level.

Here, then, was at least one reason why Koch's tuberculin had failed. There was no method available for finding out anything about it beyond what could be gathered from the condition of the patient himself; and when tuberculin was first put on the market there was a rush made for it. It was given ignorantly—by ignorant people—with desperate results alike to the patients and to the authors of the method. It was a "joy-day" for the anti-vivisectionists.

As Wright's work extended, it was found that this substance, "opsonin," was specific for each individual kind of microbe—that is to say, each separate kind of microbe produced its own peculiar kind of opsonin, protective against that microbe and against no other.

Further, an opsonin rise could be induced against almost every known microbe, whether disease-producing or non-disease-producing, and even against such "quasi-vegetable" growths as "actinomyces," or ray-fungus, and the pollen of plants.

Here was a weapon which, in skilled hands, might be used effectively against the whole range of infective disease, provided the microbe could be found.

This was Wright's idea. It was a grand conception, and he forthwith proceeded to carry it out and set about preparing his vaccines.

Wright's vaccines are not such as are used for small-pox or rabies, which consist of material carrying a living, attenuated, but as yet unknown microbe. They are doses of the microbes known to be the particular cause of the disease in question killed by heat and injected in known quantities.

In order to find the microbe, material, such as "matter" from a boil, phlegm from bronchitis, or blood from a vein, is taken and "sown" upon a surface of sterilised jelly, made from seaweed, exactly as you might take a handful of chaff mixed with various seeds and sow it on prepared ground in your garden. In the course of a few hours the germs grow in little colonies, and a bacteriologist can often name the microbe by the naked eye appearance of its growth, just as a gardener will name the seedlings in a potting shed.

All bacteriologists and all gardeners are not equally skilful. Some gardeners will take the most unlikely thing and apparently plant it just anyhow, and it grows to perfection. Others, with infinite care, only succeed as it were by accident; and so it is with bacteriologists—"*Non cuivis homini contingit.*"

Having obtained a sufficient growth of the desired microbe in pure culture in a tube, the bacteriologist washes it off the jelly with salt water, and shakes it thoroughly to form a uniform suspension of the microbes. The number of microbes in a measured quantity of this suspension is now counted under a microscope, and the whole suspension, in a hermetically-sealed glass tube, is killed by heating in a water bath. This, then, is the vaccine, and when it has been proved, by sowing a little of the suspension on a fresh sterile tube of jelly, that the microbes are all dead and incapable of producing any disease when injected, it is ready for use. To make assurance doubly sure a drop or two of carbolic acid is added to the stock of vaccine.

It sounds a simple process, but it demands infinite patience, useful hands, and absolute honesty in work, and any man (I speak to the students) who undertakes to make vaccines without these qualifications is a danger to society.

When Wright began his work he found that some infections yielded less readily than others, but in many his success was immediate and startling. Working patiently, with his distinguished colleague, Douglas, and guided ever by his own peculiar "touchstone"—the opsonic index—he attacked, syringe in hand, the infections one after another—tubercle (hydra-headed), typhoid, pneumonia, bronchitis, asthma; sepsis in its myriad forms, including peritonitis, septicæmia, childbed fever; and even such lesser ailments as "toothache," "cold in the head," hay fever, boils and blains, and "black-heads." Surely a formidable list, and yet by no means complete.

It was a giant's task, one to fire any man's imagination. It is the direct continuation of Pasteur's own work, and it has been given to an Irishman to carry on the torch.

Let it be noted that in the field of medicine, especially of preventive medicine, every great step forward of recent years has been due to the work of pathologists. What is the value of the delicate handling of a drug or combinations and permutations of drugs compared with work which has made small-pox almost a thing forgotten, which has swept Malta fever from our armies and navies, which has protected regiments against typhoid fever, and made possible the cutting of the Panama Canal by abolishing malaria and yellow fever?

Already great strides have been made against many of the most horrible forms of tuberculosis.

When vaccines do their work they cure without scarring and without deformity. As it is, many nearly blind have been given back their sight, and, as Wright says, it is only a matter of time before the high-booted cripple and the hunch-back shall disappear from our streets.

There is hardly a known form of infective disease in these islands against which Wright has not battled, and met with a large measure of success. Here is a short extract from the report of his department published this summer (1912):—

"Many a grim story of struggle against long odds has come to light in this department. For it has happened, not unnaturally, that our advocacy of a new system of treatment has evoked a challenge to demonstrate its utility *first* upon the most difficult class of patients—the undesirable of every general hospital, the unresponsive to every form of treatment. Here we have in mind, not so much consumptives, and those whose span of life can be foretold in months, but that considerable class on whom tuberculous or other disease makes less impetuous claims, sparing the lungs, but quietly destroying, scarring, crippling other parts of the body over a period of many years. A dozen faces immediately come to memory—children and young adults—who, when they came to the department, could recount already a series of ten or twenty adventures with surgery, and whose few years, despoiled of schooling and employment, had been spent nursing one part after another back to some degree of health."

How familiar is this picture to all of us who know the "Smyly Ward" and the extern department of this hospital, and when we hear men decrying the vaccine treatment of tuberculosis, let us remember that a leading physician had his life-long opposition to vaccination for small-pox engraved upon his tombstone.

There is one drawback to Wright's method, and that is the difficulty of using his touchstone—the opsonic index. He and his school know how to use it, and use it daily. In their hands it seems unerring. But many, even skilled bacteriologists, have not met with the same success, and the very existence of his "opsonin" has been scoffed at by lesser men. Yet think what the "index" has admittedly accomplished. Without it tuberculin treatment would not yet have been revived at all. And those who would relegate the "index" to the limbo of anachronisms forget that to it they owe their knowledge of the dosage of those other vaccines now in daily use.

This "index" has another priceless faculty—it can be made to work backwards. By its delicate response to the stimulus of microbic infection it can be made to indicate which of many is the real offender, and having pointed him out, it tells you what dose is most likely to destroy him. For the successful treatment of the more severe forms of tuberculosis, a knowledge of the working of the index is at present a *sine qua non*. There are many cases of that exquisitely painful condition vesical tuberculosis that have been set back indefinitely by a single incautious overdose; and, mind you, the handling of tuberculin is a delicate business. The doses are measured in parts of a milligram of killed and ground-up tubercle bacilli, and a common dose is 1-1000th of a milligram—just as delicate a thing as exposing photographic plates, when the exposures are measured in 1-1000ths of a second. Similar caution is requisite in the treatment of pulmonary tuberculosis by vaccines. All sorts of considerations have to be taken into account, mainly dealing with the prevention of auto-inoculations by enforcing absolute rest. So difficult is it, and requiring such patience, that most practitioners have given it up altogether, and yet for many consumptives this method holds out the only hope of cure.

As Wright has pointed out, only about half the cases owe their low resistance to unhygienic surroundings, and these are the cases that may do well under ordinary rest, "fresh air," and sanatorium treatment. Of these, many show marked improvement under vaccination in spite of the most desperate surroundings, and *post-mortem* findings, as well as other evidence, goes to prove beyond doubt that many consumptives have got well without any treatment at all. The other half belong to the well-to-do, many of them living in the best possible surroundings, and still they suffer. For these there is nothing for it but inoculation.

In phthisis half the mischief is due to other microbes, two or three often working together side by side with the tubercle bacillus, and these have to be ferreted out and removed *seriatim*, each with its own appropriate vaccine. Yet this can be done, but it takes skill, patience, experience, and above all a conscience. The work demands enthusiasts, men of the highest type we can produce, men with ideals, not tradesmen, nor yet fledgling specialists let loose after a fortnight's incubation upon a wondering world.

If it is asked how is this work to be done, and where are we to get the men?—my answer is, "Here, among the students of medicine—qualified and unqualified—of the Dublin hospitals." There ought to be a vaccine department within the walls of this and every general hospital.

Vaccine treatment has been carried on here in a tentative way—a very small beginning—but still something has been done, but it is crying out for organisation. There is a flourishing department at the Rotunda Hospital, under Dr. Rowlette's able management, and in the South London Union Dr. Dunne has already done fine work among the poor consumptives. But it is in the pathological laboratories of the general hospitals, in the wards, and in the extern departments that the best work alone can be done. The laboratories of the medical schools are not the places for it. For success we require not only the technical skill of the bacteriologist, but the experience, judgment, and second-sight of the surgeon and physician to read the signs aright. We must have sympathy and co-operation between the great departments. They have much to learn from one another.

In conclusion, I would remind you that in our own pathologist, Professor White, we have a man who was among the first in Ireland to take up the serious study of the new treatment; one, too, who has devised an original and admirable substitute for the all-too-intricate and tedious opsonic index—a method directly applicable to more than half the cases we should have to treat.

This old hospital was once in the very vanguard of the world's march against disease—let us no longer be camp-followers.

This is Pasteur's own work, and since the day when the Great Physician healed the sick in Galilee, no man has done so much for suffering humanity as Louis Pasteur. His motto was: *Il faut travailler.* Let us be up and doing, "for the night cometh when no man can work."

THE NEUROLOGY OF THE VISUAL SYSTEM.

A Short Series of Original Papers.

By HARRY CAMPBELL, M.D., F.R.C.P.;

Physician to the West End Hospital for Diseases of the Nervous System.

PAPER II.

Lacuna in the visual field.—A blind patch in the visual field is known as a *lacuna* or *scotoma.* In central scotoma the object fixed is not distinctly seen. In rare cases it may appear to be filmed over or covered by a dark patch, and the defect is then not due to interruption in the visual nervous path (*e.g.*, the retina or optic nerve-fibres) but to interception, by a small hæmorrhage or kindred lesion, of the rays of light between the surface of the retina and the layer of rods and cones. A lacuna of this kind is known as an *objective scotoma.*

Central lacuna or scotoma (Fig. 9) is most frequently observed in the amblyopia produced by tobacco, alcohol and diabetes. It may also result from a macular lesion.

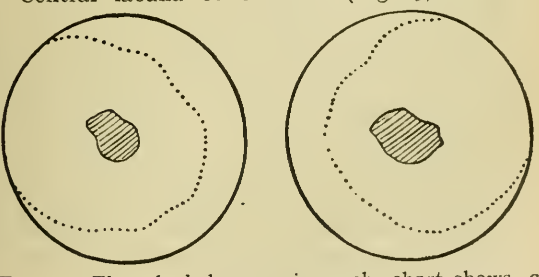

FIG. 9.—The shaded area in each chart shows a central scotoma.

In peripheral lacuna there is generally a concentric narrowing ("retraction") of the visual field. This form is most frequently met with in hysteria. Hysterical amblyopia is generally confined to the periphery of the field, but it may extend to the macular region, leaving only a narrow zone of central vision; in rare cases even this is involved. The degree of narrowing is apt to change from time to time; it is more marked when the index is moved from the periphery inwards than when it is moved contrariwise; the narrowing generally involves colour vision in the normal order, but it may happen that the red field extends beyond the blue, sometimes, indeed, beyond the white. Sometimes a central scotoma occurs in hysteria with or without a concentric narrowing of the field. It is noteworthy that the patient is much less inconvenienced by hysterical amblyopia than by that which results from organic disease.

Concentric narrowing may also result from organic causes, *e.g.*, disease of the optic nerve, retinitis pigmentosa, and glaucoma.

It may happen that peripheral and central vision are normal, leaving an intermediate annular lacuna. Irregular peripheral lacuna may result from disease in the optic tracts, optic nerves, or retina.

Defective perception of colours.—The ability to perceive colours may be lacking (achromatopsia), or curtailed (dyschromatopsia).

In cases of gross organic defect (*e.g.*, microcephaly) there may be complete congenital colour-blindness. More frequently, however, congenital colour-blindness is partial (Daltonism). It generally involves red and green, only exceptionally yellow and blue. In the red-green varieties, green and blue are the only colours seen in the spectrum; red is confounded with grey or white, green with gray or white, red with green.

Colour vision may likewise be affected by acquired disease. Disease of the retina may cause colour-blind lacunæ: retinitis pigmentosa may cause a considerable narrowing of the visual field for all the colours, even for white; and the same is true of glaucoma. Optic neuritis and optic atrophy may lead to considerable achromatopsia. In the retro-bulbar neuritis resulting from poisoning from nicotine or alcohol, central scotoma, first for green, then for red, and finally even for white, may occur. Hemi-achromatopsia has been described in connection with disease of the occipital lobe, but cases of this kind are probably instances of ordinary hemi-anopsia in which colour vision is involved. Hysterical colour-blindness has already been referred to.

Colour-blindness is tested as follows: A number of duplicated coloured wools are used. One is chosen and the patient is asked to match it. The examination should not be conducted by artificial light, but by bright daylight. The patient is not asked to name the colour: he may name it correctly, although he may not perceive the colour rightly; *e.g.*, a red-blind person, who sees red as brown, may correctly call it red, because he is accustomed to hear it so called, but his perception of the colour is not the same as that of a person with normal vision.

AMAUROSIS AND AMBLYOPIA.

The terms amaurosis and amblyopia are generally employed to denote defects of vision without any discoverable ocular defects (error of refraction, opacity of the cornea, or lens, retinitis, optic neuritis or atrophy) to account for them. The term amblyopia denotes a partial blindness of this kind; amaurosis, complete blindness.

Bilateral hysterical amaurosis:—A rare condition. There is complete blindness. The pupillary reflexes are preserved and the defect has all the characters of cortical blindness. It may last a few days only, or some weeks. It may come on and it may terminate either gradually or suddenly.

Unilateral hysterical amaurosis.—There is almost always hemi-anæsthesia on the side of the blind eye. The visual field of the opposite eye is often concentrically narrowed. The amaurosis may only be present when the opposite eye is covered, the amaurotic eye functionating normally in binocular vision.

Hysterical amblyopia: This is the most common visual defect in hysteria. Vision is generally lost in the periphery of the field (retraction of the visual field), but sometimes central vision is likewise affected. There may be defect as regards colour vision. These hysterical defects of vision may go along with retinal hyperæsthesia (photophobia) which may also occur independently of visual defect.

Reflex amblyopia: Neuralgia of the fifth nerve (*e.g.*, from dental caries) may cause transitory visual defects, largely perhaps by disturbing accommodation. The older writers frequently refer to intestinal worms as a cause of visual disturbance, though without convincing evidence. Temporary visual defects may result from disorders of the reproductive organs; but it is doubtful whether the causal connection is reflex.

Toxic amblyopia: The toxæmia caused by tobacco, alcohol (acting singly, or—more frequently—in conjunction), and diabetes induces amblyopia by setting up retrobulbar neuritis. Central vision is affected, the perception of green and red being first lost. Visual acuity may be reduced to 1/10, or even beyond this. In all but the extreme cases of amblyopia caused by tobacco and alcohol, normal vision can be recovered, provided the cause be removed. Among the other poisons which may set up amblyopia are lead, opium, belladona, quinine, salicylate of soda, and bisulphide of carbon. In the case of lead, optic neuritis and optic atrophy may occur.

Uræmia may induce blindness lasting from a few minutes to several days.

Amblyopia from disuse.—When in strabismus one eye is mainly or solely used in fixation, the other eye may lose the power of seeing distinctly. Such is frequently the case in non-paralytic strabismus of children. Normal binocular vision can be regained in these cases by re-education.

Other causes of amblyopia are profound anæmia, syncope, and fever. Occasionally sudden and complete amaurosis of a few days' duration occurs in apparently healthy people without discoverable cause.

Night blindness.—In this condition vision is good in a bright light, but almost completely fails in the dusk. Night blindness is most frequently met with in retinitis pigmentosa, and is generally congenital, increasing with age. It may, however, occur temporarily in debilitating diseases.

Summary of the effects produced by lesions in different parts of the sensory visual tract.—Except where otherwise stated, a destructive lesion is implied. (Fig. 10.)

Optic nerve and the retina: Visual defect in the corresponding eye.

Optic chiasma: Heterolateral hemianopia—*i.e.*, blindness in both nasal, or both temporal, halves of the retina: or of one nasal or one temporal half.

Hemiopic tract (optic tract, pulvinar, external geniculate body, retro-lenticular part of the internal capsule, optic radiations, peri-calcarine hemiopic cortex) : Homolateral hemianopia—*i.e.*, blindness of the corresponding lateral half of each retina. If the lesion is in the optic tract there is likewise hemiopic loss of the light reflex (Wernicke's sign). A small lesion internal to the external geniculate body, by interrupting the hemiopic light reflex fibres after they have left the visual fibres may—theoretically at least—cause hemiopic loss of light reflex without hemianopia.

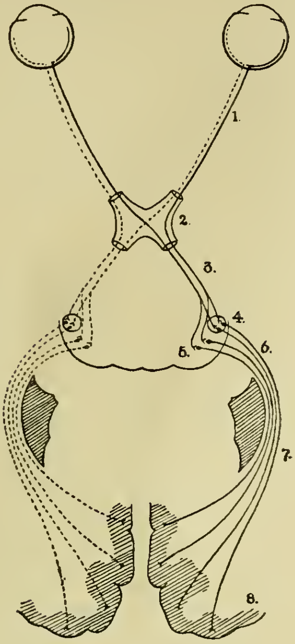

FIG. 10.—Diagram showing sensory visual tracts : 1, optic nerve, 2, optic commissure, 3, optic tract, 4, corpus geniculatum externum, 5, pulvinar, 6, retro-lenticular portion of the internal capsule, 7, optic radiations, 8, hemiopic cortex. Destructive lesions in these several parts cause : of 1, blindness of the corresponding eye, of 2, heteronymous hemianopia, of 3, 4, 5, 6, 7, or 8, homogeneous hemianopia. When lesion is in 2 (?) or 3, Wernicke's sign is present. A bilateral lesion in 8 causes double hemianopia with retention of macular vision.

Retro-lenticular part of the internal capsule : The hemianopia occurs as an adjunct to hemiplegia with hemi-anæsthesia. If the lesion is left-sided, word-blindness may also be present, from involvement of the left angular gyrus.

Supra-calcarine portion of the hemiopic area cuneate lobe) : Blindness of the corresponding (*i.e.*, left or right) upper quadrant of each retina—quadrantic hemianopia. If such a cortical lesion is bilateral : blindness of the entire upper half of each retina (horizontal hemianopia).

Infra-calcarine portion of the hemiopic area (lingual gyrus) : Blindness of the corresponding lower quadrant of each retina. If the cortical lesion is bilateral : Blindness of the entire lower half of each retina (horizontal hemianopia).

Hemiopic cortex, bilateral : Double hemianopia with retention of macular vision.

Irritative lesion of hemiopic cortex : hemiopic visual phenomena—*i.e.*, visual phenomena referred to the opposite side of the sagittal plane.

Left angular gyrus : Word-blindness.

Right angular gyrus : No effect capable of being diagnosed.

Both angular gyri : Total blindness.

Irritative lesion of angular gyrus : Visual hallucinations or simple visual sensations.

The effects of lesions in different portions of the sensory visual tracts will now be considered in detail. These lesions fall into the following groups :

A. Lesions of the retina and optic nerve.

B. Lesions producing hemiopic effects. Such are situated in the chiasma, the optic tract, the corpus geniculatum externum, the retro-lenticular portion of the internal capsule, the optic radiations, or the hemiopic cortex.

C. Lesions of the angular gyrus.

A. LESIONS OF THE RETINA AND THE OPTIC NERVE.

A destructive lesion in either the retina or the optic nerve of one side causes blindness of the corresponding eye. In no other region can a single lesion cause unilateral blindness. (Unilateral hysterical amblyopia may occur, but this is very rare.)

Lesions of the retina.—There is no need to enumerate all the various affections of the retina which may affect vision. Sudden loss of sight in one eye may result from embolism of the central retinal artery. In this case sight may be regained in a part of the retina if the circulation has not been completely arrested. Hæmorrhage into the retina may cause sudden loss of sight. The failure of vision which occurs in connection with megrim is possibly due to spasm of the retinal vessels. Such spasm has been observed at the initial phase of the seizure, when visual symptoms are so frequent. It is probably one of the causes of transient blindness and of so-called "reflex amblyopia."

Lesions of the optic nerve.—The chief are optic neuritis and optic atrophy.

Optic neuritis.—This may be intra-bulbar or retro-bulbar. The former can be detected by the ophthalmoscope ; the latter cannot.

Intra-bulbar neuritis (papillitis).—The inflammation involves the nerve as far as its termination at the sclerotic ring, where, as seen by the ophthalmoscope, it appears as the "disc."

The effusion causes the disc to swell : in some forms of optic neuritis the disc may be raised six or eight diopters and its diameter increased to twice or thrice the normal, even causing the adjacent retina to be detached and thrown into concentric folds. The capillaries of the disc are congested, but it must not be forgotten that mere redness of the disc is no evidence of neuritis. The veins are distended ; hæmorrhage into the disc and adjacent retina may occur and the vessels may in varying degrees be hidden by the inflammatory effusion. Most characteristic of all is the blurring of the disc edge. In the less intense forms the disc presents a soft, woolly aspect, and the veins are much distended. The causes of intra-bulbar neuritis may be grouped as follows :—

Tumour (cyst, hydatid, aneurysm) : The neuritis is often intense. It occurs most frequently in malignant tumour and gumma. It often occurs first and most markedly on the side of the tumour. It tends to subside on decompression, showing that increased intra-cranial pressure plays some part in causation.

Meningitis : The neuritis is rarely intense, and is most apt to occur in the basal form. In meningitis involving the cavity of the brain optic neuritis tends to appear as a later development, but it may not occur at all.

Abscess: The neuritis is not usually intense. It occurs in about two-thirds of the cases.

Toxis: Bright's disease, Lead poisoning.

Infections: Scarlatina, Chorea, Enteric fever, Measles, Influenza, Malaria, Syphilis.

Anæmias: In severe anæmias (*e.g.*, pernicious anæmia, leucæmia) besides actual hæmorrhages, slight neuritis may occur. Both of these are rare in chlorosis.

Retro-bulbar neuritis.—The inflammation involves the optic nerve behind the globe. It may occur without any discernible alteration in the disc. The causes of retro-bulbar neuritis may be classified as follows:—

Compression: Direct compression of the optic nerve (*e.g.*, by tumour) may set up retro-bulbar neuritis (see causes of secondary optic atrophy).

Toxis: In tobacco-poisoning, chronic alcoholism, gout, and diabetes, there may be neuritis, chiefly of the central macular fibres.

The Manifestations of optic neuritis.—The changes in the disc in the intra-bulbar variety have been described. When in the retro-bulbar variety the disc is not involved it appears normal. Complete blindness is rare. Short of this, there may occur a narrowing, irregular or concentric, of the visual field, with central scotoma, dischromatopsia, and achromatopsia. In the toxic forms of retro-bulbar neuritis, in which the brunt of the inflammation is apt to fall upon the macular fibres, central scotoma, especially for colours, is common.

Optic atrophy.—This may be primary or secondary.

Primary optic atrophy occurs independently of neuritis or external pressure. It generally results from toxic action. It may be congenital or familial (coming on, *i.e.*, in several members of the same family).

Secondary atrophy is that which occurs secondarily to some gross organic lesions, such as neuritis (whether intra-bulbar or retro-bulbar), or to one causing compression of the optic nerve, the chiasma, or the optic tract. (Some writers designate the atrophy which follows upon intra-bulbar neuritis "consecutive," limiting the term "secondary" to that form which results from disease implicating the retro-bulbar portion of the nerve.)

The following are the chief conditions under which optic atrophy occurs:—

Primary: In Tabes, in about fifteen per cent. of tabetic patients, constituting about one-third of all cases of primary atrophy; it is always bi-lateral and may remain all but an isolated symptom for years, causing false Argyll-Robertson pupil.

In Syphilis, but it is rare apart from tabes.

In Lead poisoning, very rare.

In Amaurotic idiocy; met with in idiots in connection with characteristic changes in the macular (here is seen a shiny red spot—the result of local œdema and atrophy of the retina).

Familial: Several members of one family are affected. A toxic factor (*e.g.* tobacco) may co-operate in causation.

Secondary: as a sequel to intra-bulbar and retro-bulbar neuritis, and to compression of the optic nerve, chiasma, or tract, with or without neuritis. Such compression may result from tumour (especially of the pituitary body), distension of the third ventricle, narrowing of the optic foramen and intra-orbital cellulitis.

The optic atrophy met with in disseminated sclerosis (present in about forty per cent. of the cases) is generally a mild form. It results from the involvement of the nerve in one of the fibrous nodules which characterise this disease. Should the nodule be situated near the disc it may give rise to the appearance of optic neuritis.

The manifestations of optic atrophy.—The disc is unduly pale from capillary atrophy, varying in aspect from grey to glistening white, but it should be noted that inasmuch as the redness of the disc normally varies considerably in degree in different persons, it may not be possible to diagnose minor degrees of atrophy from its colour. In a well-marked case, the edge of the disc stands out sharply against the surrounding coloured area. The calibre of the arteries and veins may be reduced, in which case the retina is correspondingly atrophied, allowing the vascular choroid to shine through. In the primary form the disc is hollowed out, not merely in the region of the central cup, but right up to the sclerotic rim. In the secondary form it is more apt to have a "filled-in" appearance. In this form also the atrophy is rarely so marked as in the primary.

The effects on vision of optic atrophy are much the same as those of optic neuritis. There is no necessary relation between the degree of pallor and of visual loss. In a disc originally pale, complete pallor is consistent with the retention of some degree of vision. In the early stages of atrophy following upon intra-bulbar neuritis, the sight gets progressively worse, but may subsequently improve somewhat owing to the recovery of some of the nerve-fibres. In many forms of primary atrophy (*e.g.*, the tabetic variety) the visual field tends to diminish from the periphery inwards, although central scotoma, especially for colours (which may be the first visual defect to show itself), may be present in the atrophy occurring secondarily to retro-bulbar toxic neuritis. Different varieties of hemianopia, including the quadrantic form, may occur in atrophy secondary to lesion in the chiasma.

While hemianopia practically always indicates a lesion of, or behind, the optic chiasma, it may occasionally happen that the fibres of the optic nerves (*e.g.*, in optic atrophy) are so picked out as to cause blindness in one half of each eye—either corresponding, or non-corresponding halves; but this never happens as exactly as when the lesion involves the chiasma or the hemiopic tract behind it. Horizontal hemianopias are by some, attributed to symmetrical lesions of the optic nerves.

(To be continued.)

OPERATING THEATRES.

KING'S COLLEGE HOSPITAL.

Arthroplasty.—Mr. Arthur Edmunds operated on a man, æt. 35, who had been admitted suffering from a badly united fracture of the lower end of the left humerus with complete fixation of the elbow joint. The fracture extended through the articular surface, was comminuted, the fragments being displaced inwards so that the lower end of the shaft formed a projection underneath the skin on the outer side. Pronation and supination were free, but flexion and extension were entirely lost.

An anæsthetic was administered, and the arm forcibly moved, but it was found that movement was taking place entirely through the site of the fracture, which broke down readily. An incision was then made along the outer border of the forearm externally from a point about three inches above the projecting portion of the shaft down to the line of the joint, and then inwards across the back of the joint to the level of the internal condyle, thus marking out two sides of a quadrilateral The skin over this area was then raised, the flap turned up, including only the superficial half of the fatty tissue, the inner portion of the quadrilateral being separated by undercutting at the same level. The incision on the inner side was next deepened, the joint opened, and the humerus turned out into the wound. The loose fragments of bone were removed, and the lower end of the humerus fashioned so as to resemble as far as possible the normal lower extremity of this bone, which it was found possible to do without dividing the internal lateral ligament. The skin over the quadrilateral area was then retracted, and a flap cut consisting of the deep fascia and the deeper half of the fatty tissue. This was raised except at the lower border, where it was left attached. It was considered desirable, Mr. Edmunds said, to raise the flap by this method of undercutting, rather than by turning a flap up boldly, in order to minimise the risk of sloughing, which is undoubtedly present in such thin flaps. An incision was finally made through the tendon of the triceps and the flap of fascia drawn through this into the joint cavity, where it was sutured to the periosteum over the humerus. The wound was then closed, a drainage tube being inserted at the upper angle for twenty-four hours.

Mr. Edmunds said that from the results which have been obtained by Murphy's method of dealing with ankylosed joints, it seems probable that this operation will take a permanent place in surgery, although the limits of its usefulness are not exactly defined. In the elbow it is usually preferable to take a flap from the side of the limb, but he pointed out that the projecting portion of the shaft had thinned the skin so much that it did not seem practicable to make a flap from this region in the present case. The nutrition of the flap which is interposed between the bone surfaces must always, he thought, be precarious, and it is just possible that equally good results may be obtained by covering the ends of the bone with completely detached pieces of fascia prepared exactly as he had already done and sutured over the periosteum. The principles of the operation, he remarked, are to restore roughly the bone surfaces and to interpose a flap of fascia containing fat, as it is in adipose tissue that an adventitious bursa can be most readily formed and play the part of a new joint cavity. Details of the operation, however, Mr. Edmunds pointed out, must be devised for each case.

The wound healed normally, and then passive movements were commenced, at first under an anæsthetic, and later without one. Active movements were impossible without assistance, the muscles having undergone an extreme amount of wasting before the operation, a fact that has been a considerable drawback in the after treatment of the case. The case is still under treatment, and it is impossible to say what the ultimate functional result will be, but provided the muscles recover there is every reason to hope that a satisfactory limb would be obtained in the end.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section for the Study of Disease in Children.

Meeting held Friday, November 22nd, 1912.

The President, Mr. A. H. Tubby, F.R.C.S., in the Chair.

EXHIBITION OF CASES AND SPECIMENS.

Dr. J. L. Bunch showed a Congenital Syphilitic Infant treated by Intravenous Injection of Neo-salvarsan. The child, a girl, was 2 years old, and was suffering from an offensive muco-purulent discharge from the nostrils, malnutrition, and well-marked condylomata round the anus. The Wassermann reaction had been markedly positive, and on October 30 she was given a dose of 0.45 grm. neo-salvarsan intravenously into the median basilic vein. No ill-effects of any kind followed the injection. The child left the hospital two days afterwards with the syphilitic symptoms greatly improved, and a week afterwards the condylomata and muco-purulent rhinitis had disappeared.

On November 13 a second injection of neo-salvarsan was given, this time intramuscularly into the right buttock. The amount of neo-salvarsan so injected was again 0.45 grm. The child had steadily improved in general health and had put on weight. The Wassermann reaction was negative.

Dr. Walter Carr showed a case of Partial Hemiatrophy of the Face and Tongue. Boy, æt. 9 years. About a year ago the patient's mother first noticed a whitish spot, like a scar, over the lower border of the lower jaw on the right side. Since then a gradual wasting of the lower part of the right side of the face had been observed. No cause could be assigned for the onset of the atrophy; there was no history of illness or of trauma. When shown there was marked atrophy of the skin, subcutaneous tissues and muscles over and below the right half of the lower jaw, from the angle to the symphysis. The bone itself also appeared to be somewhat wasted, but an X-ray examination did not show any definite atrophy. The skin showed slight, rather patchy atrophic changes; its sensibility was unaltered, except perhaps for a very slight diminution to touch. The muscles contracted normally, those of mastication were not affected. There was marked atrophy also of the right half of the tongue, but no affection of movement, ordinary sensibility, or taste. In all other respects, except for slight psoriasis, the boy seemed quite normal, both physically and mentally.

Mr. Lionel E. C. Norbury showed a case of Spina Bifida (Meningo-myelocele) treated by Operation. The girl when aged 5 weeks, was admitted with an ulcerating sacral spina bifida, the size of a large tangerine orange. There was very little true skin over the swelling, the covering consisting chiefly of a thin membrane, discharging in several places. There was a slight degree of hydrocephalus; talipes calcaneus bilateral; no other paralyses. After the ulcers had healed an operation was performed under chloroform anæsthesia of excision of the spina bifida by elliptical incisions. A rubber tube was stitched into the rectum to avoid soiling of the wound, but did not remain in position very long. The child was kept in a slanting position with the head low, until the wounds had healed. There was never any leakage of cerebrospinal fluid during convalescence.

The child was 16 months old when shown. She was intelligent. The anterior fontanelle was almost closed. There was no bulging in the region of the wound. The condition of talipes calcaneus remained and was being treated by massage and passive movement by the mother.

Mr. H. A. T. Fairbank showed a case of Ununited Fracture of the Neck of the Femur. The patient, a girl, aged 15, gave a history of having been knocked down and run over by a van in October, 1904. The diagnosis was said to have been "comminuted fracture of the femur near the neck." The left leg had always been short since the accident, which necessitated her lying in bed many weeks. The shortness was said to be increasing. Pain had been present at times only, but had been worse lately. The pain was severe at night, it wakened her; it was particularly noticeable on rising after sitting for long, but it was not caused by walking except in wet weather. The left leg was wasted, and held in an everted position. Flexion of the hip was possible to a right angle only; abduction was practically abolished, while internal rotation was very limited; extension and adduction were only slightly limited. The trochanter was raised, prominent, and thickened anteriorly; the real shortening, 2in. A skiagram showed an ununited fracture of the neck of the femur and coxa vara.

The case was shown in order to elicit opinions as to the best treatment. It was proposed to excise the head of the femur, and retain the limb in hyper-abduction for several weeks.

Dr. Eric Pritchard and Mr. Douglas Drew showed a case of œsophageal stricture. The patient was a boy, æt. 2 years, delicate from birth and subject to vomiting, and was admitted owing to inability to swallow solid food. He had been fed on liquid foods until recently, when inability to swallow solids was discovered. X-ray photograph showed a dilated œsophagus between the level of the suprasternal notch and xiphisternum and a stenosed portion below.

Dr. Eric Pritchard also showed a case of multiple exostoses with wasting of the muscles of the upper arm. The patient was a boy, æt. 9 years. The first exostosis was noticed at the age of two years on the inner side of the upper end of the tibia. From that time until the present new exostoses had continued to develop, and were exceedingly numerous, especially in the ribs. For the most part they were symmetrical. There was considerable wasting of the muscles of the upper arm, but muscular power was good.

Mr. Sidney Boyd showed a case of osteoma of the forearm causing considerable deformity. A boy, æt. 9 years. The tumour of the forearm appeared to be growing from the ulna, and had caused considerable bowing of the radius. It was first noticed at the age of five years. The head of the radius was dislocated outwards. There was imperfect ossification of the lower end of the ulna, and a small tumour at the upper end of the same bone. He had also several osteomata on the ribs, one at the upper end of the right humerus, and one on the vertebral border of the left scapula. His father was said to have a bony tumour of the tibia. He was the ninth of eleven children. An elder brother, æt. 19 years, had a similar but smaller tumour of the forearm; it was said to have become much smaller, and caused no loss of function. Another brother, æt. 15 years, had a similar tumour, but it caused him very little inconvenience in his work as a typewriter. A sister, æt. 6 years, also had multiple osteomata.

Dr. G. A. Sutherland showed a case of cerebral non-development. A girl, æt. 7 weeks. When aged two weeks convulsions came on in the form of irregular twitchings of face and limbs. Difficulty in swallowing was noticed. The breathing at times was rapid. The baby was fairly well nourished, the skull and other parts of the body appearing to be proportional in size. She lay in a completely apathetic condition, without smiling or taking any notice when awake, but could be roused to make certain gross movements of the trunk and limbs. although insensitive to pin-pricks. There was marked opisthotonos, with a tendency to left-sided pleurothotonos, and the limbs were in a spastic condition, flexion being present at the elbows, and extension at the knees. The hands and feet were in a condition of tetany. Other symptoms: (1) As a rule unable to suck or swallow; (2) attacks of tachypnœa, the respirations running up to 160 per minute, and being cyclic in character; (3) attacks of tachycardia, the heart-rate running up to 200 per minute; (4) fits of crying, causeless, beginning and ending abruptly; (5) spells of yawning; (6) occasional twitching about the face and hands, but no definite convulsive seizure. Fundi normal. Wassermann test negative. Cerebrospinal fluid scanty but normal; temperature normal.

It was suggested that the underlying condition was one of non-development of the cerebral lobes, and that only the celebellum, pons, medulla, and basal ganglia were active. The uncontrolled action of these lower centres would explain most of the symptoms present.

Mr. H. S. Clogg showed a case of malformation of the rectum (complete absence of the post-allantoic gut and the proctodæum); operation; result. A boy, æt. 4½ years. When five days old he was admitted to the Evelina Hospital. The abdomen was greatly distended; vomiting was frequent; there was entire absence of development of the proctodæum, without any indication where the bowel terminated. Immediate colostomy in left iliac region was performed.

When he was six months old an exploratory operation was performed from the perineal aspect. The bowel ended blindly at the level of the base of the prostate gland, to which it was adherent: it was separated from the prostate and sufficiently mobilised to enable it to be brought to the perineal skin without tension, to which, after opening, it was sutured. To render access easier a portion of the coccyx was removed. In order to mobilise the bowel the peritoneum had to be freely incised, and several resistant peritoneal and connective tissue bands had to be severed. The wound healed satisfactorily without any retraction of the bowel. The colostomy was closed later.

When shown the bowel was seen to be united to the skin of the perineum; there was no stenosis nor prolapse; the motions were passed unconsciously; there was complete absence of sphincteric control.

The case was shown to illustrate (1) the advantages of an immediate primary colostomy over a perineal dissection in cases where the bowel ends at some distance from the perineum, for a deep perineal dissection in an infant, a day or two old, suffering from obstruction must be extremely difficult and probably fatal; (2) that in order to establish a perineal anus the bowel must be freely mobilised and brought to the perineal skin without tension, or very troublesome stenosis will result; and (3) the absence of sphincter control which is to be anticipated, since the sphincters are developed from the proctodæum. In this case there were a few fibres in the position of, and having the direction of, the external sphincter muscle, but as a muscle it could not be said to be developed.

Dr. O. K. Williamson showed a case for diagnosis. The boy, æt. 10, was brought to the hospital in April, 1912, on account of tremor of the head. The illness began three and a half years before this, when it was noticed that his hands trembled and that he had lost strength in them. After this a fine tremor was noticed in the head. Since this time he had been, on the whole, less bright mentally. He got more easily excited than before, was spiteful, and had been unsteady since the beginning of the illness, and he frequently fell. He had fits of bad temper. He improved for a time, but had been worse again of late.

There were coarse tremors of the arms, equal on the two sides, also of tongue; fine tremor of head; gait ataxic and reeling; he tended to fall to the left side; Romberg's sign absent; pupils reacted well to light and accommodation; hearing normal; doubtful slight lateral nystagmus; knee-jerks normal, no definite plantar response; speech was indistinct.

Dr. J. D. Rolleston showed a pharynx and larynx from fatal case of hæmorrhage from throat in a girl æt. 6 The specimen showed an abscess cavity in each tonsil, ulceration of the uvula, soft palate, epiglottis, frenum, epiglottidis valleculæ, and aryepiglottidean folds. There was deep ulceration of the laryngeal portion of the pharynx exposing muscular tissue. Three small superficial ulcers were present above right vocal cord. The exact site of the bleeding vessel was not determined, but there was no evidence of erosion of the parotid or internal jugular, or of any glandular abscess.

Dr. C. Paget Lapage showed a primary carcinoma of the liver in a boy, æt. 6. The liver was considerably enlarged, with several rounded prominences on its anterior surface. The marked and progressive engorgement of the abdominal veins and the ascites showed that there was obstruction to the venous return in the region of the liver. There was no jaundice. The *post-mortem* examination showed that the liver was very large, weighing 6 lbs., the right lobe being chiefly affected by large masses of tumour, which were also growing into and obstructing the hepatic veins and inferior vena cava; there were secondary deposits in the lungs but nowhere else. Microscopical examination of the tumour showed polygonal and spheroidal cells in masses and columns, with very little stroma; the cell nuclei were oval or rounded, and showed many mitotic figures, and the cytoplasm was granular; there was much fatty infiltration.

There were bile-stained areas in the tumour masses and in the lung deposits, but not in the liver itself. The evidence for regarding this tumour as a primary carcinoma of the liver was twofold—viz., (1) the general resemblance of the cells to liver cells in form and arrangement, and (2) the resemblance in physiological function, as shown by the infiltration of fat and secretion of bile in both primary and secondary growths.

Dr. Leonard Guthrie read a paper on

EPIDEMIC CATARRHAL JAUNDICE.

During the months of November and December, 1911, and January, 1912, the writer had met with ten cases of jaundice in children. Two or more members of the same families had been affected in several instances, and the patients, with two exceptions, had lived in adjoining districts. Several of the patients were related as brothers or sisters. The ages of the patients ranged between three and eleven years. The liver was enlarged in six cases, and greatly so in four. Apparently all cases began with definite malaise and probably slight pyrexia, but none of the patients were seriously ill. No relapses occurred, and recovery was uneventful in all. Similar small and mild epidemics of catarrhal jaundice had been especially frequent during the last three years in this country and in many other parts of the world. A distinction should be drawn between it and Weit's disease. It was probably air-borne. The mortality was very low, but deaths had been recorded in other countries. The symptoms and pathology of the fatal cases were practically the same as in Weit's disease and in acute yellow atrophy of the liver. Epidemic catarrhal jaundice was regarded as a form of hepatitis, resembling mumps in some particulars, and not due merely to mechanical obstruction of the common bile duct, consequent to gastro-duodenal catarrh. Although no fatalities had been recorded in this country, the disease might at any time assume more serious proportions. The prognosis in any case should be guarded, and the question, "Is jaundice catching?" could no longer be answered by a direct negative. It was probably most communicable in its early febrile stage.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Obstetrics.

Meeting held Friday, November 8th, 1912.

Mr. R. D. Purefoy, P.R.C.S.I., in the Chair.

Cases illustrating the Operations of Symphysiotomy, Pubiotomy, and Cæsarean Section.

Dr. E. H. Tweedy exhibited a patient illustrating the three modern operations for the birth of the living child owing to contracted pelvis. Symphysiotomy was performed on one occasion, pubiotomy on another, and Cæsarean section on the last. When performing the Cæsarean section he tied the tubes, as he considered the patient had suffered enough at the hands of the surgeon. There was no material difference between any of the operations so far as the time occupied in bed or stay in hospital was concerned. The longest stay was three weeks and the shortest a fortnight. Symphysiotomy was a little more difficult to perform than pubiotomy, but he did not agree with the general idea that it was a painful and very difficult operation. The scar was about half an inch long instead of the pin-point scar of pubiotomy. There was not the slightest interference with locomotion, and the patient on being questioned declared that she did not mind any of the operations, and that she was as well able to walk as ever she was.

Dr. Spencer Sheill asked if Dr. Tweedy could give the exact diameters of the pelvis in the case, as symphysiotomy or pubiotomy was usually applied in one class of case and Cæsarean section in another. It would, he thought, be of interest to know why the three operations were performed in the order they were.

Dr. Tweedy said, in reply, he performed symphysiotomy first because the diameter of the pelvis permitted it and the woman was in labour; pubiotomy secondly because it was the easier operation; and Cæsarean section on the last occasion because the patient was not actually in labour, and he was not certain that the second pubiotomy would have been a safe procedure. With regard to the sterilisation, this was the first case in which he had sterilised.

Tubal Pregnancy.

Mr. R. D. Purefoy read a paper on "A Case of Tubal Pregnancy with severe symptoms without rupture," and also showed specimens.

Dr. Gibbon FitzGibbon said that at a first glance on removing a tumour of the sort, one would be justified in suggesting tubal pregnancy, but in the face of the microscopic report it was difficult to be satisfied. He did not know whether there was anything in the case to suggest that the tube had discharged the pregnancy and the hæmatoma had formed then in the tube.

Dr. Rowlette said that his examination of the specimen, as far as proving tubal pregnancy was concerned, was negative. On the other hand he did not know that the absence of anatomical evidence was a disproof. The specimen showed a concentrated effusion of blood as if the bleeding were at a definite point. He thought the diagnosis must rest on the history rather than on the examination of the specimen.

Dr. Tweedy said he thought the President in his interesting paper had exhausted the subject of hæmorrhage of the tube. He (Dr. Purefoy) had shown that hæmorrhage could arise without tubal pregnancy. He thought this fact was often forgotten.

Mr. R. D. Purefoy, in replying, said that when the patient came to him her account and the account of the case sent by the physician, together with the physical signs, led him to conclude that it was a case of ruptured tubal pregnancy, and he was surprised to find that the tube was not twisted or ruptured. He could not, therefore, accept the theory of torsion being the cause of the hæmatosalpinx.

Sterility and Tubercular Peritonitis.

Dr. Tweedy read a paper on "Sterility, the salient feature in General Tubercular Peritonitis," which we hope to publish in full in an early number.

Sir William Smyly said that the paper called attention to several points of considerable practical importance. The first was that sterility not infrequently depended upon conditions which could not be diagnosticated by palpation alone, and could only be detected after the abdomen had been opened. Therefore, in cases in which it was considered advisable to operate for the cure of backward displacements of the uterus in sterile women a method in which the abdominal cavity had to be opened would be preferable to one in which it had not. The next point raised in this paper was whether one would be justified in going even further and recommending an abdominal operation in a patient who, excepting sterility, had no symptoms whatever. Under certain conditions he agreed with the author of the paper that one should do so.

Dr. Solomons said that the question of sterility appeared to him a very difficult one so far as treatment was concerned. According to statistics collected by Brickner and published in *Surgery, Gynæcology and Obstetrics*, November, 1911, the operation of posterior division of the cervix only gave a 27 per cent. cure of sterility. If curettage and posterior division had failed to cure sterility, and there were no pathological conditions palpable, he asked should one persist in subjecting a woman to laparotomy for further diagnosis without first ascertaining whether the male was the cause?

Dr. Gibbon FitzGibbon said that in one case in his experience with retroversion of the uterus the only symptom was sterility. He could not make out anything wrong, but on doing a laparotomy he found both tubes diseased in the entire length, and he decided to remove them. He thought that in a number of cases the cause of sterility was in the tubes in the form of disease or occlusion.

The Chairman said that a good deal had been heard about displaced uterus and the fixing of same in a correct position, and it appeared to him that all the methods had advantages and disadvantages. Failure, he considered, was bound to follow if the round ligament was shortened and pregnancy afterwards took place. The same observation applied if the thin supports obtained failed to be of use in subsequent pregnancy. The paper opened up a question as to the different methods of draining the abdomen; theoretically he considered the vagina should be the correct method. The use of moist sponges and care in using them was of importance, as the less the intestines were handled the better for the patient. He hoped to hear Dr. Tweedy dealing with secondary sterility on some future occasion.

Dr. Tweedy, in replying, said before any serious operation was undertaken he considered the sterility or otherwise of the male should be ascertained. He thought that anyone would be encouraged to open the abdomen in a case of one child sterility. He considered the suggestion of insufflation of the tubes an excellent one.

THE NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held Thursday, November 14th, 1912.

The President, Dr. P. S. Abraham, in the Chair.

Dr. Agnes Savill showed a single woman, æt. 35, with an eruption on both forearms consisting of round and oval patches of erythema, of about four months' duration, accompanied by some burning sensation but no itching. There was no infiltration nor scaling. The general health was good.

Dr. Alfred Eddowes said that the condition reminded him of erythema ab igne, and he thought that the arms might have been exposed to some stimulating agent.

The President suggested the possibility of erythrasma.

Dr. R. W. Brimacombe showed (1) a case of lupus erythematosus in a woman of 31, a nurse, the condition affecting the central part of the face. She felt the cold a great deal. There was no history of phthisis.

Dr. H. Samuel, in discussing the treatment of this affection, thought that the carbonic acid snow would react too much in the acute stages of the disease

Dr. Eddowes agreed with the previous speaker and thought that morning washing should be prohibited. He recommended the use of calamine lotion only and also extolled the virtues of sour milk.

Dr. Norman Meachen said that the carbonic acid snow was more suitable for the chronic, circumscribed, discoid forms of lupus erythematosus, and that the exposure need rarely exceed 25 to 30 seconds.

Dr. Bremner advocated the use of liquor plumbi on account of its constricting effect upon the vessels.

The President thought that quinine in large doses, 15 grains per diem, was often most beneficial. The best local applications were sodium ethylate or phenocamph.

(2) A boy, of six, with a maculo-erythematous eruption upon the body and limbs of some months' duration. There had been no rise of temperature nor general disturbance.

The case excited a good deal of discussion, some members being of the opinion that the condition was one of psoriasis undergoing involution, while others suggested the possibility of a syphilide or of pityriasis rosea.

Dr. Meachen showed (1) a young man of 21 with severe ichthyosis.
The condition was congenital, and the skin was variously affected in different parts of the body. Upon the inner sides of the elbows were to be seen dark-brown, heaped-up plates, arranged in mosaic fashion, while on the extensor aspects of the lower limbs the scaling was more irregular and partook of the character of an hyperkeratosis. The face and scalp presented the characteristic drawn appearance and the hair was somewhat scanty. His health was good, but he was small and poorly developed for his age.

Dr. Tom Robinson thought that the inunction of the real brown cod liver oil was efficacious in such cases.

Dr. D. Vinrace suggested the use of liquid paraffin locally, being a very limpid oil, neutral and odourless.

(2) A case of lupus erythematosus in a woman of 56, of fifteen years' duration. Both sides of the face and several areas in the scalp were involved, and a patch on the left side presented some superficial ulceration, probably of traumatic origin. Another small shallow ulcer on the inner side of the right knee suggested the possibility of co-existent specific disease.

(3) A man, of 38, with severe acne over the trunk of long standing. All the lesions had left deeply-pitted scars. He had been operated upon twice for fistula in ano, and had suffered from polyuria, but there was no glycosuria. The question was, therefore, whether the disease should be called acne necrotica or acne cachecticorum.

Dr. Walsh showed (1) a man with a psoriatic condition on the leg associated with well-marked aortic obstruction.

(2) A girl, of seven, with a congenital pigmented hairy mole on the left cheek, immediately beneath which was some slight scarring of a nævoid character. On the opposite cheek and upon the chin were other small nævoid areas, suggestive of symmetry.

Dr. Robinson was of the opinion that these cases were really instances of reversion to some primitive type.

He next exhibited a case of lupus erythematosus in a married woman, aged 23, in whom the lesions had made their appearance during the last six months upon the face. There was no history of tuberculosis. The peripheral circulation was poor.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 23rd, 1912.

Fracture of the Skull.

Fracture of the skull without external wound is not always easy to recognise. Functional symptoms alone furnish the basis of diagnosis, facial paralysis, when it exists, and frequently, says Professor Mauclaire, a simple ecchymosis of the conjunctiva, the issue of blood, or serosity from the nose or ear, will put one on the track.

In doubtful cases, the lumbar puncture will give important information on the composition, the tension, the colour of the cephalo-rachidian liquid which completes the diagnosis.

In the absence of grave signs, such as coma and depression of the skull, there exist a small number of signs which have their importance. The complications usually observed are: commotion, contusion, and cerebral compression.

Cerebral commotion can exist alone or accompanied by fracture of the skull, and may be classed under three heads: slight, moderate, or grave.

In its slight form, commotion produces a transitory loss of consciousness; the patient, from a blow or a fall, experiences a sense of dizziness, noises in the ears, and appears as stunned. The face turns suddenly pale, the pulse is slow and irregular, and at the end of a few minutes the patient comes back to himself, but unconscious of what has happened to him.

In moderate cases, the phenomena are more pronounced: coma is more profound, muscular resolution and insensibility more complete, respiration is weaker, the pulse soft, compressible and slow; besides, there is incontinence of the sphincters.

This form lasts a few hours, and the patient comes slowly back to life.

In grave cases, resolution and insensibility are complete; the patient succumbs to syncope, cardiac, or respiratory of bulbar origin, after a few days.

The diagnosis of cerebral commotion due to fracture of the skull should not be affirmed before other affections giving rise to coma are considered.

The coma of drink is easily recognised by the special odour of the breath; that of epilepsy by the froth at the mouth, the convulsive form of the attack, and the traces of biting of the tongue.

Cerebral hæmorrhage is generally accompanied by immediate hemiplegia; besides, in apoplexy the face is purple, contrary to what is observed in cerebral commotion, where the face is pale, the coma is more complete, as well as the loss of sensibility.

In simple meningitis, the patient is in a state of torpor and somnolence, rather than coma.

Coma of uræmia is accompanied by convulsions, delirium, hypothermia, and Cheyne Stokes respiration; that of diabetes is characterised chiefly by hypothermia and chloroform breath.

Where the traumatism has been more intense, the brain is the subject of more or less attrition characterising cerebral contusion. At the beginning the symptoms may be confounded with those of commotion. When the contusion is seated over one of the motor and sensorial zones, the cortical lesion will provoke such symptoms as aphasia, facial paralysis.

Ordinarily, these centres are irritated, producing partial contraction of the limbs, the muscles of the face, convulsions, local paralysis. Later on, all these symptoms recede, and the patient recovers, or, on the contrary, complications set in, and notably meningo-encephalitis.

Depression of a fragment of the bone or pressure from blood effusion are the essential causes of traumatic cerebral compression.

The symptoms differ according to the seat of the compression. Intellectual disturbances, particularly aphasia, follow compression of the anterior lobe; that of the middle lobe is characterised by hemiplegia, while where the posterior lobe is compressed anæsthesia is complete.

The general signs of cerebral compression are intense and immediate: slow pulse, stertorous respiration, Jacksonian epilepsy, delirium and coma.

When the compression is due to effusion of the blood, rupture of the middle meningeal artery is generally the cause; the blood is accumulated between the dura mater and the bone, forming a large pancake clot. The symptoms are: loss of sentiment, hemiplegia, total and complete, stertorous respiration, lowering of the temperature, of the pulse, dilatation of the pupil on the side of the compression.

The prognosis of closed fractures of the skull is very grave, on account of the divers possible complications mentioned, of which the most to be feared is meningo-encephalitis, which appears towards the sixth or eighth day after the accident.

GERMANY.

Berlin, Nov. 23rd, 1912.

AT the Medical Society Hr. Friedmann brought forward his

TREATMENT OF TUBERCULOSIS

by what must at present be called a secret method. As the treatment and its results have been rather fully discussed in the lay papers I may as well pass on to the discussion that took place after the delivery of the address.

Hr. Erich Müller reported a short series of cases, mostly of surgical disease, in which the treatment under discussion had been very successful.

Hr. Karfunkel was able to report on 450 cases of his own that had been treated by the Friedmann method. They could be divided into the following groups:—Commencing pulmonary phthisis, phthisis of a progressive character, very advanced phthisis, glandular tuberculosis, scrofulous exanthems, scrofulous affections of the eye, tuberculosis of the bones and joints, lupus and cutaneous tubercle. The results were surprisingly alike. In more than 200 cases of pulmonary phthisis he did not see a single case that did not respond in the most favourable manner to the remedy. After the results he had met with he would not think of treating any case of tuberculosis in any other way than by Friedmann's remedy. Twenty-two cases of scrofulous disease of the eye were all healed in a few weeks, four of them having been under treatment for years. He had never seen any relapses. He would also mention that Hr. Friedmann had had the goodness to treat his (the speaker's) own son, æt. 6, who had from his second year been subject to feverish attacks of bronchitis, with a cough like whooping-cough, and coming on every six or seven weeks, so that a suspicion arose as to whether there was not tuberculosis of the bronchial glands. The cutaneous reaction was positive. In connection with the injection an attack came on which lasted four days; but after this there was no return, and the patient had since thriven splendidly.

Hr. Küster said that he had followed Friedmann's treatment for two years. As he had previously said, when we were able to inject living non-poisonous tubercle bacilli, we should then inject the uninjured protective body into the system, and a great result must follow. He had therefore sent his patients to Friedmann in the fullest confidence, and his confidence had not been misplaced. He had made the observation that if there was a small secreting wound, the results were not so great as he had at first thought them to be. Since Friedmann had, however, adopted the double method of injection—the "simultaneous" method, injecting into both muscle and vein—he had seen the results in Karfunkel's klinik, and he could tell them that he had been completely surprised. He did not think such results had been possible. He was of opinion, however, that great as these results were, those from inoculation would be of greater importance still to Germany. If it was a great thing to cure tuberculosis, it was a still greater to prevent it. Friedmann had compared inoculation for tuberculosis with vaccination for small-pox, which, in well-vaccinated countries, had well nigh disappeared. He had himself seen plenty of small-pox, but many young doctors had never seen a case. Friedmann's inoculation was superior to Jenner's, great as that was, as with the latter there was no reaction. Of course, there would be denyers and objectors, as in the case of vaccination, but science would triumph over them.

Hr. Heymann could but say that he had been surprised and satisfied in the highest degree with what he had seen of the success of Friedmann's treatment. The experiences with his own cases had not been so exclusively good; but it must be borne in mind that, with one exception, they belonged to the worst classes that could be met with in the polykliniks of a large city.

Hr. Blaschko said he could not report such dazzling results as the previous speaker. Hr. Friedmann had said that some failures were due to a too sensitive skin; this acted in such a way that abscesses developed after injection. His own experiences were of a date before Friedmann had begun the double simultaneous injections, and with nearly all his cases abscesses followed, and very little influence was observed on the disease, and especially was this the case when a weeping track was left. In one case of lupus in the axilla, Friedmann made the injection near to the diseased part, and a remarkable improvement followed; but the same patient had also lupus on the ear, and that part did not participate in the improvement, so that Hr. Friedmann had to inject direct into that part also. It would appear, therefore, that tuberculosis of the skin presented far greater difficulties in regard to the treatment than would appear to be present, judging from the reports. He saw a good result in the case of a ward sister who had suffered from a tuberculous infection of the fingers for seven years. She had been treated by himself and others in every thinkable way, but the disease steadily advanced. He sent the patient to Hr. Friedmann, and a few days ago she was brought to him to show herself. He must say that the result had been very good. He would not say yet that a perfect cure had been effected—the time was too short for that; but there had been seven fistulæ, and they were all closed but one. He must say that in that case a quite surprising effect had been produced in an extraordinarily severe morbid process.

Hr. Citron said that useful as dead bacilli were as regarded diagnosis, they were useless in respect of treatment. For treatment and for prophylaxis, if we would obtain good results, nothing but living, unchanged bacilli came under consideration. All the great results of inquiry into immunity, such as Jenner's and Pasteur's had achieved, had been obtained with a living virus, not with Wright's vaccine, which contained dead bacteria material.

He therefore was of opinion that Hr. Friedmann had been on the right path. Although he must recognise this on theoretical grounds so long as he was ignorant of the remedy he must maintain a certain reserve as to practical application.

The greatest inquirer into immunity of the past, Pasteur, had in his time at last met with a mischance with fowl cholera. He started with great success, but met with a check. In many cases his inoculations led to a devastating epidemic. The reason was that his avirulent material for some reason became virulent. So long as we did not know the nature of the virulence we could not be master of it at will, but some day the tables might be turned and an avirulent virus might for some unknown reason become virulent—so long we should dread the possible change becoming an actuality when treating human beings. With his earlier studies Hr. Friedmann spoke only of a living avirulent bacteria material of a tuberculous nature. If he had succeeded in treating human tubercle bacilli into avirulent material, he should hesitate before advising the use of the virus.

Hr. Orth (Chairman): If Hr. Friedmann's address had not been as complete as it might have been, he (the chairman) was responsible. He had requested Hr. Friedmann to be as brief as possible. He must also acknowledge that the experiments on guinea-pigs which had been made had not given absolutely good results by any means. The animals that had been inoculated by Friedmann's material had certainly lived longer than the control animals, but they had all become tuberculous.

Hr. Klemperer had ascertained years ago that when an animal was slightly infected, so that the disease ran a slow course, and when whilst still ill it was re-injected by a weakened culture, recovery took place. There was here a general rule—a subsequent active immunisation can only act curatively so long as the infection ran a slow course and the immunisation was sufficiently powerful. But they had no immunising material against tubercle, and he might add they never would reach the result of curing tuberculous animals by tuberculin. Dr. Robert Koch had said to him a non-virulent virus must be found for the human subject which could be injected living into the patient, and which would remain alive in him, without causing suppuration. In 1906 and 1907 he had worked with Friedmann with the tortoise bacillus, but they had to give it up on account of the suppuration it caused. The problem now was: Had Hr. Friedmann taken from his bacilli the tendency to set up abscesses? If he had injected them subcutaneously or into the muscles, and they had retained their vitality, without setting up abscesses, he had no doubt of his success. The whole secret of Friedmann's remedy for him was: How had he deprived his bacteria of the power of causing abscesses?

Hr. Goldscheider wanted to know more definitely about recoveries. He wanted to know the exact condition before treatment and the physical condition after it; not that patients got violently hungry or that their condition was much improved. Then, as regarded prophylaxis, he would underline what had been said by Hr. Citron; he must be abundantly satisfied as to the harmlessness of the bacilli before he would inject an army of children with it. He was convinced that the public would be astonished if the Medical Society did not at least set up a note of interrogation in regard to prophylactic inoculation.

AUSTRIA.

Vienna, Nov. 23rd, 1912.

CHEMISTRY OF CANCER.

AT the Gesellschaft der Aerzte, Freund said that he had again to seek the indulgence of the members on a subject that he and Kaminer had brought before them some time ago. On that occasion it was shown that when the serum of an uncancerous person was injected into the site of a removed cancer the cancerous cells were destroyed, but if the serum of another cancerous person was injected into a similar site the cancerous cells were not destroyed. The same condition existed when injected subcutaneously. Under these conditions he felt in doubt whether he had removed the cancer or not after a local operation of the total extirpation of the cancerous mass. He thought no radical cure had been effected in the body when this general disposition existed in the serum. To prove its efficacy in another way he had gone further to examine the cancerous mass itself. A piece of tissue was taken from the body and broken up in a 0.8 per cent. solution of common salt and an extract prepared which was applied for 24 hours at a temperature of 40° Cent. to the cancerous cells. The extract from the healthy patient or non-cancerous person showed the same destructive power on the cancerous cells, while the non-cancerous cell was preserved. The extract from the cancerous patient had the same preservative property of the cancerous cell as the serum had, and exercised a deleterious effect on the normal healthy cell. We may therefore conclude that the cancerous preservative property is the same body as acted in the blood serum. Those extracts were taken from the healthy parts of the cancerous patient. Now, if the extract from a cancerous ulcer of the leg be taken from the margin of the sore it has the same destructive action on the cancerous cell, but if the extract be made from the centre of the sore this solvent condition of the cancerous cell is lost. The same condition exists in cancerous ulcers of the stomach and chronic inflammatory affections of the mucous membrane of the uterus. It must be noted, however, that every cancerous patient has not this loss of power in the central part of the cancer, and even some cancerous patients had in the non-affected or healthy tissue of the body sometimes a solvent power of the cancerous cells, at other times it was absent and existed more frequently in the epithelium cells. We must therefore conclude that the predilection for cancer in a healthy organism is to be found in the normal solution of the tissues and where this is reduced we have now what is termed "Locus minoris resistentiæ." To produce cancer, however, a general disposition is necessary with a pathological condition of the nucleo-globulin in the serum. The presence of a pathological nucleo-globulin is not sufficient of itself to develop cancer if the normal protection of the body is reduced.

UNITED STATES OF AMERICA.

New York, Nov. 14th, 1912.

CLINICAL CONGRESS OF SURGEONS OF NORTH AMERICA.

THE third annual meeting was held in New York City this week. This meeting was noteworthy for many reasons. In numbers it surpassed any Congress of a like nature held on this continent, and there can have been few anywhere which have excelled it in this respect. In the neighbourhood of 2,700 surgeons from all parts of America, with a few from Europe, registered. The meeting was unique in that no Congress has ever assembled in which so great attention was paid to

THE CLINICAL FEATURES.

On every day of the week in which it took place, commencing on Monday, November 11th, clinics were held in almost every hospital and sanatorium of Greater New York, and it has been stated that no fewer than 200 clinics took place on each day. New York City is undoubtedly a great surgical centre, and her foremost men in every branch of surgery demonstrated their ability. This is not to say that spectacular or out-of-the-way operations were performed, although many wonderful surgical methods were practised, but as a rule the ordinary routine of the hospitals was proceeded with. To eulogise the value of this mode of arranging a Congress would be superfluous, for it goes without saying that to the general practitioner who does not live in a great city more is to be learned in this way than by the reading of numerous papers. However, the work at the clinics will be dealt with later, and in this account a brief *résumé* will be given of some of the happenings at the stated meetings. A feature which distinguished this Congress was the marked enthusiasm displayed by those who attended. The Waldorf Astoria Hotel was the headquarters of the Congress, and no place could have been chosen better adapted for the holding of such a meeting. Its position is central, and its capacity appears to be almost unlimited. So far as the reading of papers was concerned, the meetings for this purpose were held, with the exception of one, in the splendid ball-room of the hotel on the evenings of the first five days of the week. This room will probably seat, with its boxes and galleries, more than 2,500 persons, and on each evening it seemed to be filled to its utmost capacity. Indeed, at the opening meeting it was uncomfortably crowded, many being unable to obtain seats.

The meeting was opened by Dr. George E. Brewer, of New York City, who, in a short, pertinent speech, introduced the President, Dr. Ochsner, of Chicago. Dr. Ochsner said, in part, that the large attendance at the Congress was an inspiration. New York had always been a surgical centre, but never more so than at the present moment. There was a time when wealth, victory in combat, or personal aggrandisement, was the measure of man's greatness, but now personal service was the prime element of achievement. About half a century ago teachers grasped this fact and impressed upon their pupils that education must include ethical development. A willingness to render service was more profitable to him who received than to him who gave. Dr. Ochsner then went on to point out the significance and value of such a meeting to the visitors, and especially to the younger men, and concluded by introducing his successor to the presidency, Dr. Edward Martin, of Philadelphia, who had done more than anyone to develop and advance the Congress.

Dr. Martin, after introducing the visiting delegates, including Dr. Otfrid Froester, of Breslau, Germany, Mr. Arbuthnot Lane, of London, England, and Dr. J. B. Murphy, of Chicago, and others, delivered his presidential address, the topic of which was "The Treatment of Hepatic Cirrhosis." Dr. Alonzo Taylor, of Philadelphia, read a paper on the "Relations of the Bio-chemical Functions of the Liver to Surgery of the Liver"; after which Dr. William J. Mayo, of Rochester, Minnesota, read a very instructive and valuable paper dealing with the

Surgery of the Spleen.

He said we had acquired a fairly exact knowledge of the functions of the organs contained in the abdomen, with the exception of the liver and spleen. The liver was essential to life, one of its chief functions being to receive the products of gastro-intestinal absorption and change them into tissue-building material. The spleen was not essential to life. It performed for the general circulation a function somewhat analogous to the digestive organs—namely, removing from the circulation broken-down blood corpuscles and other material of probable nutritive value, which was sent as part of the portal circulation to the liver for further elaboration. It was also concerned in the metabolism of iron. The spleen was an organ of internal secretion controlled by chemical stimulation through the blood stream. Evidently the internal secretion of the spleen was not important, since splenectomy did not produce serious results, the associated organ taking up the function. Dr. Mayo further defined the functions of the spleen so far as they are known, and went on to say that with the present insufficient methods of diagnosis diseased spleen was not often mapped out until its size was made manifest on palpation beyond the free borders of the ribs. Dr. Mayo discussed lucæmic spleen, and said as it was but part of a general condition, splenectomy would be unavailing. Splenic anæmia was probably a definite entity, and at St. Mary's Hospital, Rochester, they had removed the spleen in eighteen cases of splenic anæmia with most gratifying results.

The speaker next considered conservative splenic enlargements due to malaria, syphilis, typhoid, and tuberculosis, and stated that in a few cases of tuberculosis, when the infection was apparently primary and limited to the spleen, the spleen had been removed with the cure of the patient. Sarcoma was the type of primary malignant disease of the spleen and was rare. Some pathologists held that these were sarcoma and others that they were a type of hyperplasia. As a rule, disease of the spleen was far advanced before a diagnosis was made, and usually the entire organ was involved, making splenectomy the only rational procedure. Dr. Mayo described the *technique* of the operation as performed at St. Mary's Hospital, and said that in their 27 cases there had been two operative deaths.

(*To be continued.*)

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

EDINBURGH.

Medical Treatment of School Children.

An important special case on this subject was heard in the Court of Session. A Glasgow ratepayer has raised an action for declarator and interdict against the Glasgow School Board, on the question whether the latter are entitled to provide dental treatment for two school children whose parents, on account of poverty, are unable to do so. The Board proposed to pay for the treatment out of the school fund, and the pursuer denies that they are legally entitled to do so. For the Board, counsel quoted Section 4 of the Education (Scotland) Act, 1908, which is as follows:—"A School Board may, and when required by the Department shall, provide for the medical examination and supervision of the pupils attending schools within their district to such an extent and subject to such requirements as may from time to time be prescribed by any code or minute of the Department, and for the purposes of this section, the school board may supply medical officers or nurses or arrange with voluntary agencies for the supply of nurses and providing appliances or other requisites." Lord Mackenzie asked: "If the statute meant treatment, why didn't it say so?" Counsel submitted that what the statute meant was to provide such medical supervision as would enable children to take full advantage of the education given. The Lord President asked whether counsel asserted that a Board was entitled to spend public money on anything calculated to put a child in a proper state of health? "Are you arguing that, when you find a child in a one-roomed house which is dirty, you are entitled to provide the parents with a two-roomed house which is clean out of the school rate?" Counsel replied that the Board had power to deal with children who were starved or verminous, and practically take these children into their own hands to improve their condition. The Lord President pointed out that every child had a certain amount of dentistry to go through, and that this was a large order. If counsel's argument were right, the health of every child in the school area might be taken in hand. Lord Mackenzie: "This is a very important question; and do you say it all depends on the interpretation of the ambiguous word 'treatment' by a Court of Law whether you are entitled to do all this?" Counsel replied that, in the view of the education authorities, there was no doubt about it; if they were not right, the power merely results in the accumulation of statistics, and does not enable the Board to do anything more for the children. Lord Kinnear: "If the power is so extensive as you say, it would have been only to be expected that Parliament should have said so in plain words." Counsel: "I am afraid I cannot say they are absolutely plain words." The view of the School Board was that the matter was within their own discretion. After hearing counsel for the pursuer, the Court made avizandum.

Extension of the Victoria Hospital and Dispensary, Edinburgh.

The new dispensary buildings were inaugurated on November 23rd, by Lord Dunedin, who performed the formal opening ceremony. Sir Malcolm Morris, London, took part in the proceedings, and described the inception of the campaign against tuberculosis in this country. Letters of apology for absence were read by a number of medical men, including Professor Beraneck, Neufchatel, who paid a tribute to Dr. Philip's work in connection with the systematic eradication of tuberculosis. A congratulatory cablegram from Dr. Herman Bigg, New York, was also read. There was a large assemblage of those interested in the Victoria Hospital, and the meeting was presided over by Sir Alexander Christison, chairman of the committee. In the course of their remarks Lord Dunedin, Sir Malcolm Morris, and others took occasion to express the hope that an arrangement might be come to between the Insurance Commissioners and the authorities of the Victoria Hospital whereby the latter agency might be made use of in connection with sanatorium benefit. The new dispensary, which is much larger and more commodious than the existing one in Lauriston, consists of St. Cuthbert's United Free Church and Hall, situated at the corner of Spittal Street and Lady Lawson Street, which have been acquired for the purpose. They are planted in the heart of one of the most populous districts in Edinburgh. The buildings, as altered, include an administrative and educational department. The patients' entrance leads into a vestibule and office, from which there is access to the waiting hall in the nave of the church. The aisles have been divided up to form a series of consulting rooms, dressing rooms, drug laboratories, lavatories, etc. On each side there are four rooms, three *en suite*, constituting consulting room and dressing room for male and female patients. Off each consulting room is a small dark room for laryngoscopic examinations. A separate ante-room, apart from the general waiting room, is provided for patients who attend merely to obtain medicines. The gallery of the church has been converted into research laboratories and an X-ray department, which are fitted up in the most approved fashion. Another part of the gallery has been made into a library, designed to offer to students and practitioners a consulting collection of books on all matters pertaining to tuberculosis. A separate entrance is provided for the use of the medical staff. Adjoining this is the board room, pathological museum, statistical department, and a large lecture hall. There is a large basement, which can readily be adapted to the purposes of increased laboratory accommodation. The cost of the work is estimated at £8,326, and the architects are Messrs. Sydney Mitchell and Wilson.

GLASGOW.

The Functions of Fever Hospitals.

Dr. Alexander Johnston delivered a lecture on Friday last, November 22nd, in Glasgow University in connection with the Glasgow School of Social Study and Training, and took as his subject "The Functions of Fever Hospitals." Dr. Johnston is superintendent at Belvidere Fever and Smallpox Hospital, and in his discourse traced the advance of the modern fever hospital as being the result of the unhealthy conditions under which the people dwelt during the nineteenth century. The introduction of Loch Katrine water supply into Glasgow coinciding with the disappearance of cholera, and the relative preponderance of cases of fever over smallpox, was pointed out as having been influenced by the consequence of vaccination tending to diminish the incidence of smallpox amongst the younger members of the population. The year 1862 was a memorable year for Glasgow, for in it the Sanitary Committee, with the late Mr. Ure as chairman, was nominated, and also by the appointment of the late Dr. (afterwards Sir William T.) Gairdner to the Chair of Medicine in the University, and Professor Gairdner was soon afterwards appointed first medical officer of health, with five assistants, who were district police surgeons. Professor Gairdner undertook work as enormous as it was varied, and the control of fever and the question of hopital accommodation came prominently forward for consideration. For the purpose of isolating and treating cases of fever a hospital was erected in the neighbourhood of St. Rollox containing 136 beds, and the prevalence of fever and its devastating effects was so great that no other infectious disease, apart from cholera and smallpox, which were at that time comparatively scarce, was admitted to the hospital, and which was accurately named a fever hospital. The advantage of isolating infectious disease was shown to have a marked bearing upon the distribution of infection, and the success of the first municipal hospital, opened in the year 1865, was so marked that the estate of Belvidere was shortly afterwards purchased for the purpose of increasing the means or checking and controlling fever.

The fevers having been subdued, and cases of smallpox provided for by the erection of a small-pox hospital, attention was turned to the more destructible infectious diseases of childhood. A resolution was adopted by the Town Council in 1881 to admit all citizens free to the hospitals, and thus the popularity and usefulness of the hospitals was increased. As the fevers had steadily declined, the hospitals were able to devote wards to the treatment of other infectious diseases; and the fever hospitals, as they were originally called, became changed into hospitals for the treatment of infectious diseases.

Besides the benefit to the public health from the removal of sources of infection from the midst of the people, and the isolation in hospitals, the patients suffering from infectious diseases had received the best medical attention and nursing procurable. The relief which the general hospitals obtained from the removal of infectious cases from their wards acted beneficially on the patients for other than infectious diseases, and it allowed these institutions to develop and expand their methods for dealing more particularly with important surgical cases.

The fever hospitals had also become important centres for the training of medical students in the diagnosis and treatment of infectious diseases. Isolation and treatment in hospital had greatly reduced the deaths from infectious diseases, and this reduction had had a material influence in lowering the death-rate of the city from all causes.

Queen Margaret College Students' Union.

On Saturday afternoon, November 16th, the formal opening of the new union at Ann Street was held, when Miss Elizabeth Thomson, M.A., President of the Union, presided and gave a sketch of the progress of the Union, the house at Buckingham Terrace and the new premises. Queen Margaret students have actually been in possession of their new premises since the early part of the year, and it was thought desirable that there should be a formal opening, to which the students could invite some of the friends who had assisted them in realising their desire to possess premises convenient to the University, which would be sufficiently large for the members attending and in every way adapted for their purpose, with dining-room, drawing-room, library, and other rooms. Lady Stirling-Maxwell expressed her pleasure in being invited to declare the Union open and congratulated the students on possession of such premises.

Stirling Royal Infirmary.

The annual meeting of the subscribers was held on Monday, Nov. 18th; Provost Bayne occupied the chair. The directors' annual report was adopted and stated that the work of erecting the additional wards had made considerable progress, and it was hoped that they would be completed in the beginning of next year. The cost of the wards was £12,000, of which already £11,000 had been subscribed.

During the year the number of in-patients treated at the institution had been 509, as against 441 last year, while the out-patients, numbering 2,130, attended at the dispensary, being an increase of 128 compared with last year.

The Convalescent Home at Chartershall had received 186 patients, an increase of 17 on the previous year. The ordinary income for the maintenance of the Infirmary fell short of last year by £69 2s. 1d., and amounted to £1,559 7s. 5d., and the expenditure amounted to £1,952 7s. 7d., an increase of £298 12s. 4d. more than last year, the total deficiency on the year's working being £393 0s. 2d.

Appointment.

Dr. John A. Watt, M.B., D.P.H., has been appointed Tuberculosis Officer and Assistant County Medical officer for Derbyshire. Dr. Watt is a distinguished Graduate of Aberdeen University, and for many years practised in Aberdeen, in which city he held many public medical appointments, and, at the present time, is Senior Assistant County Medical officer of Health for Lanarkshire.

BELFAST.

The Insurance Act.

The Derry County Council met last week to consider a model scheme submitted by Dr. Charles

Dickson, one of the medical inspectors of the National Health Insurance Commissioners, for dealing with tuberculosis in the county. Mr. Barrie, M.P., said that he would be entirely in favour of the scheme if they had full information about the grant in aid from the Treasury. But they were asked to enter on large and unknown expenditure on sanatoria, dispensaries, tuberculosis doctors, local doctors, nurses, attendants, and so on, relying on the Treasury's assurance that they would give some help. He thought that they should wait three months till the Treasury's assurance took some more definite shape. He reminded them of how their local taxation accounts had worked out; they had gone to large expenditure, relying upon a similar promise, but the fund became insolvent, and in County Derry alone they had suffered a loss of £7,900. He moved the adjournment of the matter till their January meeting. This was seconded and passed unanimously.

SANITARY CONDITION OF PORTADOWN.

The latest instance of the prophet having no honour in his own country comes from Portadown, where Dr. Rowlett, the well-known and energetic health officer, condemned an unsanitary area containing 196 houses, and recommended their demolition as unfit for human habitation. Naturally, this caused a fluttering among property owners, and a special inquiry and visitation was carried out by the Sanitary Committee of the Town Council. They have reported that many of the houses are models of cleanliness, well looked after, and filled with healthy families of children! Not more than 10 per cent. of the houses needed repair. Dr. Rowlett tried in vain to persuade the Council that clay floors, absence of ceilings, and proximity of privy middens did not conduce to health, and the report of the Committee was passed.

QUEEN'S UNIVERSITY OF BELFAST.

The report of the Vice-Chancellor of Queen's University for 1911-12 has just been issued, and discloses a flourishing state of affairs in most departments. The new students numbered 177, of whom 65 men and 66 women matriculated, and the remainder were admitted through other recognised avenues, such as the senior grade intermediate examination. The entry shows an increase of 40 on the previous year. The medical school has 266 students, the science school 90, and the arts 159.

THE OFFICERS' TRAINING CORPS,

which is doing so much for the University, entered into possession of its new home last week, when a spacious drill hall, with rifle range, offices, etc., was opened by Brigadier-General Count Gleichen, K.C.V.O. The new hall abuts on Botanic Avenue, on the site of the old ball-alley, which past students will well remember. The corps, which is the senior one in Ireland, numbers 180 members, and of these 104 have received the A certificate and 47 the B certificate. There are three companies of infantry and a medical unit, and there is a prospect of forming an army service corps unit as well. Count Gleichen announced that the Civil Service Commissioners, as regarding the medical unit, were considering the advisability of granting commissions in the Army Medical Corps and in the Naval Medical Service to officers of the Officers' Training Corps who had passed this medical training and had a medical certificate. If such an arrangement is made, no doubt it will act as a further inducement to medical students to join the corps. Their teachers will give them every encouragement to do so, as the corps' training is of inestimable benefit in every way, both physically and morally.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THE DEFENCE OF AUTOMATISM.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—It is evident that "Barrister-at-Law" (*vide* letter *Times*, November 15th) is not in full possession of the facts concerning the remarkable case tried before Mr. Justice Scrutton at Derby, and referred to in your last issue.

Although medical evidence as to the physical and nervous disabilities of the prisoner was given in detail by the experts who had personally examined him, this evidence was practically ignored by his lordship when charging the jury.

When dealing with the question of the somewhat rare, but nevertheless well recognised mental phenomenon, the mental expert explained in detail and with extreme care that, in his opinion, the personality A, which committed the crime, was not the whole individual, but only an integral part of the fully awake conscious personality, B. He also said he believed, from authentic records and from cases within his own experience, that in such instances the fully awake conscious personality B knew nothing of acts committed automatically or subconsciously by A.

He did not countenance the fiction of "Dr. Jekyll and Mr. Hyde," to which the learned judge had so often referred, although there were many instances on record in which there had existed conditions of alternating personality. Referring to the case under trial the expert described the abnormal condition of the prisoner at the time of the committal of the offence as having been, in his opinion, one that was well recognised in medical practice—namely, "mental automatism" or "fugue," and as being midway between somnambulism and a minor form of epilepsy.

On cross-examination the expert most emphatically denied that in this case the personality A, which committed the crime, was either complete or responsible inasmuch as the condition was purely automatic, and, therefore, irresponsible. Be it noted also that the fictitious division of the personality into personality A and personality B was made by the counsel for the prosecution and adhered to by him throughout and later adopted by the learned judge to illustrate his argument in spite of the protests of the medical expert against any such splitting of personalities, there being but one personality—*i.e.*, the one fully-awake and conscious; any other abnormal mental states occurring in the same individual being not evidences of the existence of another personality, but evidences of somnambulism, mental automatism, fugue, or minor epilepsy, in which conditions all sorts of complex mental and physical activities might be displayed.

When summing up to the jury, Mr. Justice Scrutton said: "In that dock there is sitting a body; in the body is a brain which in some mysterious way controls and regulates the body; and in some way, which Science does not yet understand, there is attached to that brain the power of determining action and the power of judging whether that action is right or wrong. That body, brain and judgment bear the label C, and the prosecution say that that body, brain and judgment, with that label, between June 29th and July 2nd, took away a motor car of Dr. B—— with the intention of depriving Dr. B—— permanently of the possession of that car. The answer made is that part of that body and brain may have taken the motor car, but the whole of it did not do so; part of it, and the responsible part, was asleep and woke up on July 2nd, and that part and the responsible part never knew anything about and never intended the act, and, therefore, you cannot punish the whole body and brain for what the inferior part did when the governing part was asleep."

To these remarks no exception need be taken, but the subsequent remarks by the learned judge on the merits and demerits of the fictional "Dr. Jekyll and Mr. Hyde," as if this was the case now before the jury, could scarcely be regarded as in keeping with the practice of the law, and more especially so after the refusal of the medical men to deal with the consideration of cases other than those which were authentic in fact.

After a medical expert had stated on oath that he was of opinion that the prisoner was at the time of the committal of the act neither fully-awake nor completely conscious, and that the individual had been but incompletely represented, his Lordship evoked a laugh by remarking, "I take it that it was whatever is in the dock now."

Mr. Justice Scrutton, in the course of his summing up, referred also to the danger of establishing such a precedent in a Court of Law, and harked back to the early Victorian findings with regard to the MacNaughton case. His Lordship also said he had an uncomfortable suspicion that if, instead of there being in the dock a well-dressed body of apparent education charged with stealing a motor car, there had been a poor man in rough corduroys, charged with breaking a window and going off with some jewellery, and that poor body had said, not through learned counsel or specialists, that part of the body did the deed, but the responsible part was asleep, probably the judge, and certainly the jury and everybody in court, would have thought very little of the defence. They must be very careful that they did not make for the rich a law they would not make in the case of the poor.

The questions put to the jury were :—

(1) Did the prisoner on June 29th to July 2nd take away Dr. B——'s motor car with the intent to permanently deprive him of possession of the car?

As there was no denial as to the commission of the act the jury rightly answered "Yes."

(2) If so, was he *insane* at the time he did it? Inasmuch as the plea of insanity formed no part of the defence—the mental expert having emphatically declined to agree to the suggestion made by the counsel for the prosecution that the prisoner was insane any more than a somnambulist or epileptic was necessarily insane—the question in itself had absolutely no bearing whatsoever upon the case under consideration.

This case serves but to emphasise the absurdity of attempting to harmonise early Victorian Law with modern medicine, and it would seem advisable in the interests of justice that such cases should be tried in the light of existing knowledge.

I am, Sir, yours truly,

London, November 25th, 1912. MEDICUS.

REVIEWS OF BOOKS.

MEDICAL DIAGNOSIS. (a)

DR. MITCHELL STEVENS modestly declares that it is with much hesitation he puts this result of many years' work before the public. It is true that there has been more than a sufficiency of books on diagnosis within the last few years, and the physician is inclined to be indifferent when he sees another announced. Too many of these books are merely ill-digested compilations through which the reader wades, conscious at every turn that the work is impersonal, and that the author has no convictions or opinions, and is without the critical faculties necessary to make a compilation of any use. Dr. Stevens' book is, however, of quite another class. It is the expression of the wide personal experience of a highly observant and critical physician. As such it cannot fail to be of service to an intelligent reader, be he hospital physician, general practitioner, or medical student.

Dr. Stevens in the first instance, after a brief introduction on case-taking, devotes a section of seventy-five pages to general symptoms and general physical signs. The entire of this section is deserving of close reading. The later sections dealing for the most part with special groups of diseases will doubtless be of service rather for reference than for consecutive reading. We cannot, however, imagine a better preparation for a clinical lecture, both for teacher and student than the perusal of the paragraphs or chapters dealing with the particular subject of the lecture.

We find little in Dr. Stevens' teaching to criticise. Many, however, will think him too dogmatic in saying that in some cases of undoubted typhoid fever no Widal reaction can be obtained. Such cases are generally found, on further investigation, to be cases not of typhoid, but of para-typhoid infection of one or other variety. We are surprised, indeed, not to be able to find any reference to para-typhoid infections.

Dr. Stevens' book is well turned out, and furnished with both a good index and a full table of contents, features whose importance in a book of the kind cannot be exaggerated.

ROYAL LONDON OPHTHALMIC HOSPITAL REPORTS.

THE third part of the Royal London Ophthalmic Hospital Reports for this year (a) is by no means meat for babes; it contains nine papers which for their solidity and thoroughness remind one of the contents of a German medical magazine much more than the usual English ones. The most important of these papers is a really masterly monograph on Primary Tumours of the Optic Nerve, by Mr. A. C. Hudson, the Curator of the Hospital Museum. It runs to 123 pages, and includes notes of 191 cases, gathered from all parts of the world. Of these the great majority, 118, were of a type met with chiefly in quite young people, of slow and painless growth, which Mr. Hudson looks on as essentially an overgrowth of glial tissue. There is no local recurrence after removal of these tumours. Most of the other cases were either fibrous or endothelial tumours of the nerve sheath.

Mr. J. H. Parsons contributes two papers, one on Scotopia, or Vision in Dull Illumination, and a second, highly mathematical, on the Perception of a Luminous Point. Mr. G. Coats has three papers on pathological subjects.

LITERARY NOTES.

THE Calendar of the National University of Ireland for 1912 (Dublin: Alex. Thom and Co.) has recently reached us. It is a handy volume, bound in neat dark green cloth. It prints in full not only the Charter of the University, but the Irish Universities Act (1908), documents it is useful to have at hand. The lists of officers, both of the University and of the constituent colleges, are given, as well as the members of the Senate, of Convocation and the graduates of the University.

* * *

WE have received from Messrs. Beynon and Co., the Cheltenham art publishers, a set of advance proofs of Guy's Hospital sketches. The set consists of eight capital etchings of various parts of the buildings, by Hanslip Fletcher, the illustrator of "London, Passed and Passing," and other works. The plates are fine collotype impressions of sketches made by the artist at the hospital last spring, and they catch the spirit of the place in a way that will go straight to the heart of every old Guy's man. The cost of the set is one guinea and a half—a remarkably moderate price for signed proofs of fine quality. The series only requires to be known amongst the many persons interested in Guy's Hospital to command a large and steady sale.

* * *

IN the introduction to the little "Manual for Women's Voluntary Aid Detachments," the author informs us that his object is that of indicating to the members of a Women's Voluntary Aid Detachment what will be the scope of their duties if ever they are called upon to serve in time of war. Although the intention is excellent, and although we are not disposed to question the accuracy of the author's statements, the writer of this note, as an army medical officer of many years' experience, is compelled to point out that most of the information herein conveyed is what any woman gifted with common sense would certainly know for herself, and a good deal more can only be learned by practical training and experience. On this ground, therefore, it cannot be said that the book accomplishes any distinctly useful purpose.

* * *

IN "The Valley of Vision" (Simpkin, Marshall and Co., 1911), Dr. G. M. Irvine has made a curious and interesting contribution to psychological literature. His book is a series of half-a-dozen visions or adventures, which we take to be the dreams of a patient suffering from the delirium of acute disease. A word overheard by the subject gives in each case the starting-point, and the various series of events which follow are developed with much skill and ingenuity. Some of the tales are the exercise of mere fancy, but in others Dr. Irvine satirises various phases of modern life. The politicians of his own Ulster, the members of his profession, modern financiers, and controversial theologians—all are treated with a severe, though humorous, pen. It is unfortunate that the book has been disfigured by "sixteen full-page, sepia plate drawings."

(a) "Medical Diagnosis." By W. Mitchell Stevens, M.D., M.R.C.P. Demy 8vo., pp. xi. and 1,571, with 177 illustrations. London: H. K. Lewis. Price 25s. net.

(a) "The Royal London Ophthalmic Hospital Reports." Vol. XVIII., part III. London: J. and A. Churchill, July, 1912.

Medical News in Brief.

The Treatment of Tuberculosis in Edinburgh.

The new dispensary of the Royal Victoria Hospital for Consumption in Lady Lawson Street, Edinburgh, was opened last week by Lord Dunedin. Sir Alexander Christison presided. Lord Dunedin said that one of the first men who really woke up to the fact that tuberculosis could be combated by an organised campaign was Dr. Philip, of Edinburgh.

Sir Malcolm Morris, one of the founders of the National Association for the Prevention of Consumption, said that but for the work carried on by Dr. Philip and the laymen who had co-operated with him tuberculosis would never have been dreamt of as suitable for inclusion in the Insurance Act. The Chancellor of the Exchequer would never have dared to touch tuberculosis if it had not been for the movement carried on in Edinburgh.

A demonstration of the methods of the Edinburgh system for the prevention and treatment of tuberculosis was given in the United Free Assembly Hall in the evening.

University College, London, and the New Laboratories.

The new Pharmacology Laboratories at University College built by the generosity of Mr. Andrew Carnegie, will be opened by the President of the Royal College of Physicians of London, Sir Thomas Barlow, Bart., K.C.V.O., M.D., F.R.S., on Wednesday, December 4th, at 5 p.m. The Right Hon. Lord Reay, K.T., The Chairman of the College Committee, will preside, and the Vice-Chancellor of the University of London, Dr. W. P. Herringham, has promised to be present.

The Institutional Treatment of Inebriety in Scotland.

The report of the Inspector for Scotland under the Inebriates Acts issued last week states that at the end of 1911 there were seven institutions open for the treatment of inebriates, and during the year the receptions at reformatories totalled 166, as against 143 in the preceding year; whilst the number of patients entering retreats was 140, as against 129 in 1910.

The Inspector (Mr. James C. Dunlop) says the figures point to the conclusion that in Scotland the institutional treatment of the voluntary patient is becoming more frequently taken advantage of, and at present there was no indication of greater numbers being compulsorily detained in the reformatories. At the end of 1911 there were 44 retreat patients, 31 certified reformatory inmates, and 19 State reformatory inmates.

Staffordshire Memorial to King Edward.

Lord Dartmouth opened last week a new wing of the Wolverhampton and South Staffordshire General Hospital, erected by the townspeople at a cost of £8,000 as a memorial to King Edward. It forms the first section of a reconstruction scheme, the estimated cost of which is £60,000. Mr. William Smith, a working man, handed to Lord Dartmouth a cheque for £1,000 raised by working men of the town and district.

Medical Sickness and Accident Society.

At the usual monthly meeting of the Executive Committee of this Society, the claim account presented showed a decided margin in favour of the Society as against the amount expended. Quite a new feature of the Society's experience is to be met with in the number of motor accidents. These show a steady increase, and some at any rate have been serious and have involved long periods of incapacity. It is important to note that no extra premium is charged to members using motor cars or motor cycles. Under one of the present Bonus schemes should death take place before sixty-five their representatives would be entitled to an amount which increases automatically with the length of membership and the sum insured. It was decided to hold the annual meeting at an earlier date than usual. Full details of this will be given by advertisement in the medical journals some months in advance.

University of London.

The following have passed the third (M.B., B.S.) examination for medical degrees:—

Honours.—C. M. Jones (*a*), Westminster; C. J. Marshall (*a*, *b*, *c*, University Medal), Charing Cross; J. Taylor (*a*), Univ. Coll. (*a*) Distinguished in medicine; (*b*) distinguished in pathology; (*c*) distinguished in foresic medicine.

Pass.—C. Aldis, Guy's; W. M. Ash, London; C. A. Birts, Univ. Coll.; F. H. Bousfield, London (R. F. H.) Sch. for Women; R. Brewitt-Taylor, St. Bartholomew's; B. W. Brown, Westminster; B. I. Cohen, St. George's; T. P. Cole, Guy's; Gertrude Dearnley, London Sch. for Women; L. A. Dingley, Univ. Coll.; H. T. Evans, St. George's; W. B. Foley, St. Thomas's; J. M. Foord, Univ. of Leeds; G. E. Genge-Andrews and W. S. George, Guy's; A. J. Gibson, St. Bartholomew's; C. Gibson, London; C. D'O. Grange, St. Bartholomew's; F. W. Hamilton, Middlesex; A. W. Hansell, Univ. Leeds and Univ. Coll. Hosp.; A. W. Havard, London; B. W. Howell, St. Bartholomew's; A. H. Hudson, St. Thomas's; G. W. B. James, St. Mary's; Mary S. Jevons, London Sch. for Women; Mirza Mohammed Khan, J. S. H. Lewis and R. H. Liscombe, Univ. Coll. Hosp.; Dorothy C. Logan, Univ. Coll., Cardiff and Lond. Sch. for Women; Emily C. Macirone, London Sch. for Women; P. J. Monaghan, Guy's; J. F. O'Connell, St. Mary's; H. W. Parrott, London; Purushottam Tulsidas Patel, Bombay and London Hosp.; Sara L. Penny, London Sch. for Women; F. H. Rees, Univ. Coll.; J. F. G. Richards, Guy's; W. G. Rogers, U. C., Cardiff, Charing Cross and London; E. G. Saunders, St. Thomas's; W. F. V. Simpson, London; H. K. V. Soltau, St. Batholomew's; J. L. Stewart, Guy's; J. Tattersall, St. Mary's; F. R. Todd, St. Bartholomew's; E. A. Wilson, Middlesex.

F. C. McCombie, M.D., King's Coll. Hosp., has passed the B.S. examinatian for students who graduated in medicine in or before May, 1904.

Apothecaries' Hall of Ireland.

Notice of Elections of Examiners for 1913.—The annual election of Examiners (Courts A and B) will be held on Friday, December 20th, 1912, at 4.30 o'clock p.m. All applications to be forwarded to the Registrar, 40 Mary Street, on or before Tuesday, December 17th.

Results of Quarterly Examinations.—Intermediate Examination.—Passed in Anatomy—Ambrose Macaulay, Francis Duckworth, Daniel Crowley. Passed in Physiology and Histology—Frederick Duckworth, Daniel Crowley. Passed in Materia Medica—John B. Barry, Morgan B. Kennedy. Completed Examination—Frederick Duckworth, John B. Barry, Morgan B. Kennedy.

Final Examination.—Passed in Medicine—James B. Barry, S. Ram Rao, Frederick Duckworth. Passed in Surgery—Andrew S. Dillon, S. Ram Rao. Passed in Medical Jurisprudence and Hygiene—John B. Barry, Frederick Duckworth. Passed in Pharmacy—Frederick Duckworth. Completed Examination—S. Ram Rao, Andrew S. Dillon. Examination for Registered Medical Practitioner—Thomas P. Magnier, M.B., B.Ch., B.A.O., N.U.I.

Society of Apothecaries of London.

The following candidates, having passed the necessary examinations, have been awarded the L.S.A. Diploma of the Society, entitling them to practise Medicine, Surgery and Midwifery:—T. J. Gibson and W. C. Himely.

SUMMARY OF RECENT MEDICAL LITERATURE ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Coliform Organisms in Healthy and Infected Urinary Tracts of the Female, with Report on Vaccines.—Williams and others (*Jnl. Obs. and Gyn. Brit. Emp.*, xxii., 2), in the first instance, tested the urine taken from thirty women about to undergo operation, and again twenty-four hours after operation. The bacilli isolated gave the characters of the *B. coli* group. Forty-two per cent. of the cases before operation, and 92 per cent. after operation were found to contain organisms. At the early examinations the colonies were relatively few, at the second examination they were unduly overcrowded, whether the patient had been catheterised before or not. No symptoms attributable to the presence of the bacilli or their increase in number were evident. To overcome the objection of contamination in taking the specimens, twelve other specimens were taken by puncture of the bladder during laparotomy in patients under operation for uncomplicated displacements. Four of the specimens gave on culture a similar Gram-negative motile bacillus. Although the cultural characters of the bacilli were identical, the serum relation, as shown by agglutination, was widely different. In twelve cases of chronic or acute pyuria *B. coli* was pathogenic in four, probably a contributory cause in two, incidental in two, and in four not found. The biological relation between organisms culturally identical is slight, and the cultural relations of organisms associated with pyuria show pronounced variations. For this reason there is little hope that good results can be obtained by the use of stock vaccines. As regards the treatment of bacilluria with pyæmia, the authors consider the cure is represented not by the total absence of organisms from the urine, but by the disappearance of the ordinary evidence of inflammation. Frequent examination of the urine is necessary for treatment, and routine administration of the same dose of vaccine is not likely to produce the best results. In administering the auto-vaccines the authors aim at producing a moderate local reaction. In acute cases small doses—5 to 10 million—are sufficient to produce this, but if no local or general reaction occurs the dose is cautiously increased till it appears. No acute case should be given an initial dose of more than 10 million, and even three million will produce effect on the temperature. Any exacerbation of the symptoms is an indication that the maximum therapeutic dose has been given. The opsonic index is of use for dosage, but the authors have chiefly judged by the clinical condition. In acute cases it must be remembered that the auto-inoculation of the patient is proceeding in addition to the artificial inoculations, and therefore at times an overdose is unintentionally given. The results in acute cases were excellent. The doses were increased up to 200 million in the more persistent cases at increasing intervals. The acute symptoms subside rapidly, but some pyuria is apt to persist. In subacute and chronic cases the initial doses were from 50 to 100 million, and increased to 200 and 500 million, the intervals being also greater.
F.

Primary and End Results of Radical Abdominal Operations for Cancer of the Uterus.—(*Surg., Gyn., and Obs.*, xv., 2.)—Three papers dealing with this subject are published, the first by R. Peterson, who reports 51 cases and says he adheres to the operation, because all others have given uniformly bad ultimate results. Fundal cases are much more responsive to treatment than cervical disease, but they should be subjected to as thorough an operation. There was a primary mortality of 19.5 per cent. It was 42.8 per cent. in the first 14 cases; this he considers was due to the prolongation of the operation, which is a potent cause of shock. Excessive fat is considered a contra-indication. Dissection of the glands should only be done after a short operation, when the patient is in good condition; the wide removal of the parametrium is of more importance, and the ultimate results do not justify an increase of the primary mortality. Peritonitis is best avoided by rendering the vagina clean before operation and shutting it off by right-angled clamps. Infection is favoured by drainage, which should be restricted and shut off from the peritoneal cavity; but of 14 cases operated on five years ago or further back five are living and free from recurrence. The second paper, by H. C. Taylor, reports 28 cases. He says that in those cases in which the ordinary abdominal or vaginal hysterectomy is done, 50 per cent. have had symptoms lasting less than three months, while only 10 per cent. had symptoms for more than six months. Of the cases of radical operation only 18 per cent. had symptoms under three months, while 40 per cent. had them for six months or longer. Statistics from Germany show that 54 per cent. had symptoms less than three months, and only 18 per cent. for over six months. This accounts for the better results obtained by the operation in Germany, and the chief need is for the better education of the medical profession and public in the early recognition of symptoms. He does not consider right-angle clamps necessary, but thinks equally good results can be obtained by thoroughly wiping out the vagina when first opened. The operation is justifiable in cases with bad prospect of permanent cure, by reason of the great relief of pain. He has verified no case over five years still alive. The third paper, by F. T. Taussig, deals with 60 cases. He reports five cases well at the end of five years out of 14 operated upon, and eight cases well after four years out of 25 operated upon. He considers that in very advanced cases the immediate operation risk and the likelihood of recurrence such that these patients are best classified as inoperable. He divides his cases into four groups—(1) those diagnosed by microscopic evidence 3, all possibly saved by operation; (2) cervix alone macroscopically involved, 16 cases, 14 possibly saved, 2 died from operation; (3) cervix and vagina involved and slightly extended into parametrium, 26 cases, 10 possibly saved, 6 died from operation; (4) extensive involvement of parametrium, but not hopelessly inoperable, 15, none possibly saved, 10 died from operation. F.

Potassium Iodide in Bier's Treatment.—Bier (*Medical Review*, October, 1912), in order to avoid the formation of cold abscess, and in open tubercular lesion of luxuriant granulations, which sometimes follow prolonged passive congestion, advised the limitation of treatment to one or two hours daily. This reduces the number of complications, but largely robs the treatment of its value. Lately, Bier, recognising the value of the old observation that iodine acts not on the germs of syphilis, but on the proliferating tissues it provokes, was led to try the internal administration of iodides to prevent the excessive granulation tissue formation arising in the course of treatment by passive hyperæmia. He reports several cases where the combined treatment was most successful. He gives 45 grains of potassium iodide daily to adults, and proportionate doses to children. The congestion can then be maintained for four hours thrice daily, and can be pushed till considerable hyperæmia and œdema have been induced, provided pain and discomfort are avoided. Iodides alone have little or no action on tuberculous granulation tissue, and treatment by passive congestion alone is at first as beneficial as when iodides supplement it. But without the administration of iodides, the treatment of severe articular tuberculosis for twelve hours daily with passive congestion usually leads to the formation of cold abscess. By preventing this complication, iodides enable passive congestion to exert its beneficial action undisturbed and uninterrupted. Though the mode of action of iodine on the tissues under certain conditions may not be clear, its prevention of the familiar complications following passive congestion is a fact. S.

The Suturing of Tendons.—Kerr (*Practitioner*, November, 1912) confines himself to the consideration of incised wounds received about the forearm, wrist and hand. As asepsis is so important in these cases, the "first aid" treatment should be confined to the application of sterilised lint, covered by ample sterilised cotton wool. Digital pressure on bleeding points is not permissible. The diagnosis of the injury should be made by examining the action of the tendons before the first dressing is removed. To facilitate this a tight bandage is applied over cotton wool around the wrist and the tourniquet removed. Exposure of the wound, painting of the part with iodine, the placing of two fingers above to control the arteries, is followed at once by the application of "mosquito" artery-forceps to the bleeding vessels. The tendons most commonly divided are the palmaris longus and the flexor carpi radialis, and frequently the flexor longus pollicis. As the tendons are usually stretched and prominent at the time of the accident, the median nerve lying free from tension is more out of harm's way, usually the distal end of the lesion only is seen, but sometimes this end is hidden unless the hand is placed in the extreme flexed position. The risks of sequelæ of sepsis are much greater if the flexor sublimis or deeper tendons are divided. Local anæsthesia by the "block" method is all that is generally required. Only reliable catgut is used. The divided ends of the tendons are sought for by appropriate manœuvres, as, for example, if the flexor of the middle finger is cut, possibly its upper end may be brought into view by hyperextending the ring and index fingers. If this fails, dissection will be required, but the fasciæ cut must again be united separately and carefully when the tendons have been united. After-treatment consists in immobilising the cut tendons completely from 14 to 21 days during the formation and consolidation of the granulation tissue which constitutes the uniting material. Functional treatment must commence during the third week, while adjustment of length is still possible in the young connective tissue, which after six weeks practically cannot be further lengthened.
S.

Antityphoid Inoculation.—Spooner (*Jour. Amer. Med. Assoc.*, October 12th, 1912) records the results of three years' experience of antityphoid inoculation in the training schools for nurses in Massachusetts. In order to produce immunity, Spooner used small doses frequently repeated of a low virulence vaccine. The stock culture from which the vaccine was prepared had been isolated from the spleen of a patient with enteric fever in 1902, and consequently its attenuation has been considerable. Four injections were given in each case at intervals of five days, the dose varying from one million to six million, according to the body-weight of the patient. It was found that given in this way the vaccine caused slight inconvenience, and seemed to produce a protection among the nurses, a class which had previously been found to be eight times more liable to the disease than the average individual. The case mortality among the uninoculated was found to be nearly nine times greater than among the inoculated under similar conditions. Furthermore, no permanent untoward effects have been recorded from over 5,000 injections. Examination of the blood of the inoculated patients showed a certain protection lasting for at least two and a half years. The use of this method of protection has been shown to be safe in two epidemics and very efficient in at least one of them. K.

Death after Salvarsan.—Ruhe (*Cleveland Med. Jour.*, September, 1912) records the results of a very careful histological examination of several of the organs of a patient who died five days after the injection of 0.5 gram of salvarsan given intravenously for the treatment of syphilis. Complete anuria for four days followed the injection. On the fifth day after the injection about three ounces of clear urine were passed. At the autopsy evidences of severe intoxication were found, the main effects of which were seen in the liver and kidneys. These organs showed degenerative changes and proliferation of the parenchymatous elements. These histological changes in the liver and kidneys were similar to those that are produced in experimental arsenic poisoning. K.

Bismuth Poisoning.—Warfield (*Amer. Jour. of the Med. Sciences*, November, 1912) records an interesting case in which symptoms of chronic bismuth poisoning followed the injection of about two ounces of bismuth subnitrate paste into an ilio-psoas abscess. The patient was a poorly developed child of nine years of age, who had been under treatment some time for spinal caries. Subsequent to this injection the child displayed typical symptoms of chronic bismuth poisoning, with ulceration of the mouth and the black line on the gum margin. Warfield states that there are reports of more than twenty deaths caused by the administration of bismuth preparations internally, or as dressings for large raw wounds, particularly burns. It would appear that one should be very careful that the paste, if injected into sinuses, is afterwards extruded or removed. The internal use of bismuth for X-ray work in the intestines is not devoid of danger where inflammatory conditions exist or where the patient is much run down in health. Bismuth salts, like lead and mercury salts, may cause definite and characteristic symptoms of poisoning in more or less susceptible persons. "Peculiarly characteristic of bismuth stomatitis is the whitish, diphtheritic membrane which caps the ulcers." The visceral lesions caused by bismuth also show that it is one of the metallic poisons, and therefore should be used with caution. K.

Chloroform Poisoning.—MacCardie (*Birmingham Med. Review*, October 15th, 1912) records several cases in which toxic symptoms developed in patients after the administration of chloroform for the production of surgical anæsthesia, and apparently due to the use of the drug. As a result of his investigations in this subject he draws the following conclusions:—"(1) Never administer chloroform if etherisation is possible even to children or pregnant women. (2) Avoid carbohydrate starvation, or any other form of starvation before operation. (3) If chloroform must be used, administer dextrin or bicarbonate of soda freely for days beforehand, especially if the patient be young or his condition septic. (4) If post-chloroform poisoning develops, administer freely soluble carbohydrates (dextrose) and bicarbonate of soda, in the worst cases injecting the dextrose into the subcutaneous tissues and rectum, or even intravenously." K.

NEW APPLIANCES.

ENDOLYTIC TUBES.

WE have received from the Endolytic Tube Co., Hampton-on-Thames, a series of the new endolytic tubes for clinical diagnosis, and after testing the same we have no hesitation in saying that the introduction of these ingenious contrivances marks a revolution in the art of urine testing. Test tubes, bottles of solution and the spirit-lamp are all rendered unnecessary, for the practitioner, armed with a set of the tubes, can rely upon the speedy and accurate determination of the abnormal constituents of urine literally by the bedside. The test solutions are enclosed within special capillary tubes, which are simply broken across and brought into contact with a drop or two of urine. We consider the method cleanly and reliable, and that the inventors' claim of "bringing the full advantages of the laboratory to the beside in the waistcoat pocket," are fully justified. A box of 100 Endolytic Tubes in a compact nickel case, holding 15 to 20 tests, is sold at 5s.

NOTICES TO CORRESPONDENTS, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ADVERTISEMENTS.

For One Insertion:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Mr. W. I. (London, W.) is thanked for his paper which is marked for early insertion.

M. B. (Perth).—The best Japanese oil of peppermint is produced in Okayama and Hiroshima Prefectures, and it is remarkable for the large proportion of menthol crystals it contains. It is chiefly grown on the hillsides, and it is said that attempts to introduce the American and English plants, which yield an oil superior in taste and odour to the native plants, have not been successful.

THE USE OF CELLULOID.

The Departmental Committee appointed by the Home Secretary to inquire into the precautions necessary in the use of celluloid have opened their inquiry, and will be glad to receive evidence on the following heads:—

(1) The inflammability of celluloid, its liability to explosion and spontaneous ignition; standard tests for ascertaining purity and inflammability; the cost, reliability and practical utility of non-inflammable substitutes.

(2) Serious accidents due to fire or explosion in this country or abroad in factories or workshops or retail shops, or in connection with storage, conveyance, or private use.

(3) Government and local regulations existing or proposed.

(4) The various uses of celluloid in manufacture; the precautions adopted and their adequacy.

(5) The dangers of celluloid; how far they are realised by the public.

It is not the intention of the committee to limit witnesses to the above, but they think it desirable to give some indication of the kind of evidence which appears likely to prove useful for the purpose of the inquiry.

Persons desirous of giving evidence or of submitting information to the committee are requested to communicate with the Secretary, Mr. C. G. Markbreiter, of the Home Office.

Dr. F. R. C. (Somerset).—It would be premature, in the absence of more specific information, to pronounce definitely as to the value of Dr. Friedmann's discovery. It is stated in the lay Press that over one thousand patients have been treated with his anti-tuberculous preparation, and that it is perfectly innocuous. Such statements must necessarily be accepted with some reserve until further medical details are forthcoming.

Erratum.—"Phthisis—a New Remedy."—In the interesting letter by Dr. J. W. Lane in our issue of November 20th, an error occurs in the direction, "add to each ounce of solution when used *cocaine Hg.* gr. ⅛th." It should have been—*cocaine hydrochlor. gr. ⅛th to each drachm.*

Meetings of the Societies, Lectures, &c.

Wednesday, November 27th.

Hunterian Society (London Institution, Finsbury Circus, E.C.).—8.30 p.m.: Council Meeting; 9 p.m.: Dr. W. M. Ettles: Special Lantern Demonstration of Diseases of the Eye.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H Duncan). 5.30 p.m.: Eye Operations (Mr. Brooks).

Brompton Hospital for Consumption.—4.30 p.m.: Lecture by Dr. Fenton: Demonstration of Cases.

Thursday, November 28th.

Child Study Society, London (Royal Sanitary Institute, 90 Buckingham Palace Road, S.W.).—7.30 p.m.: Discussion on the Outlook of the Adolescent towards Livelihood (opened by Mr. A. H. Paterson and Mrs. M. O'Brien Harris, D.Sc.).

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel). 4.30 p.m.: Lecture: Mr. E. Gillespie: Tuberculous Bone and Joint Lesions, their Diagnosis and Treatment.

Appointments.

Fox, W. T. B., M.B., M.S.Edin., Certifying Surgeon under the Factory and Workshop Acts for the Blyth District of the county of Northumberland.

Greer, M., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Corris District of the county of Merioneth.

Jackson, D. J., M.D., B.Ch., R.U.I., Second Assistant Medical Officer at the Mental Hospital, Whitchurch, Cardiff.

Jeffrey, George R., M.D.Glasg., F.R.C.P.Edin., Physician-Superintendent to the Bootham Park Private Mental Hospital, York.

Lee, D. Chisholm, M.B.Edin., Assistant Medical Officer at the Warneford Mental Hospital, Oxford.

Lloyd, Bertram Arthur, M.B., B.S.Lond., F.R.C.S.Eng., Resident Medical Officer at Charing Cross Hospital.

Long, H. B., M.R.C.S., L.R.C.P.Lond., Certifying Surgeon under the Factory and Workshop Acts for the Bicester District of the county of Oxford.

Vacancies.

Ayr District Asylum.—Junior Assistant Physician Salary £140 per annum, with board, lodging, and laundry. Applications to Dr. McRae, Glengall House, Ayr.

Crichton Royal Institution, Dumfries.—Second Assistant Physician. Salary £200 a year, with apartments, board, and laundry. Applications to the Physician Superintendent.

Joint Counties Asylum, Carmarthen.—Second Assistant Medical officer. Salary £160 per annum, with board, lodging, washing, etc. Applications to the Medical Superintendent.

Guy's Hospital.—Gordon Lecturer on Pathology. Salary £600 per annum. Applications to the Treasurer, Superintendent's Office, Guy's Hospital.

Lincoln County Hospital.—Junior House Surgeon. Salary £100 per annum, with board, residence, and washing. Applications to the Secretary-Superintendent.

Lowestoft Hospital.—House Surgeon. Salary £100 per annum, with board, residence and laundry. Applications to E. S. Norton, Clerk, 148 London Road, Lowestoft.

Leicestershire and Rutland Asylum.—Junior Assistant Medical Officer. Salary £150 per annum, with board, residence, and laundry. Applications to W. J. Freer, Esq., Clerk to the Visitors, 10 New Street, Leicester.

Wakefield General Hospital.—Second House Surgeon. Salary £100 per annum, with board, lodgings, and washing. Applications to the Hon. Secretary, Clayton Hospital, Wakefield.

Dublin Joint Hospital Board.—Consulting and Visiting Physician to Sanatorium, Crooksling. Salary £100 per annum. Applications to T. O. Fitzgerald, Secretary. (See advt.)

Apothecaries Hall of Ireland.—Election of Examiners. Applications to the Registrar. (See advt.)

Incorporated Dental Hospital of Ireland.—One House Surgeon, one Prosthetic House Surgeon, four Instructors in Conservative Dentistry. Immediate application to W. A. Shea, J.P., D.L., Registrar. (See advt.)

Births.

Gauntlett.—On Nov. 17th, at Bloxham, Oxon, the wife of Harry Leon Gauntlett, M.R.C.S., L.R.C.P., A.K.C., of a daughter.

Hutchinson.—On Nov. 18th, at 22 Queen Anne Street, W., to Dr. and Mrs. Robert Hutchinson, a son.

Smalley.—On Nov. 17th, at Suva, Fiji Islands, the wife of James Thornton Smalley, M.R.C.S.Eng., L.R.C.P.Lond., of a son.

Walker.—On Aug. 4th, at Naini-Tal, U.P., India, the wife of Major J. N. Walker, I.M.S., of a son.

Marriages.

Gardiner—Hare.—On Nov. 19th, at St. George's, Hanover Square, Harold Gardiner, M.B., B.S., only son of F. A. Gardiner, Esq., F.L.S., of "Inversnaid," West Heath Avenue, N.W., to Constance Mabel, only daughter of Henry T. Hare, Esq., F.R.I.B.A., and Mrs. Hare, of 31, Cumberland Terrace, Regent's Park.

Johnston—Craig.—On Nov. 19th, at All Saints', Knightsbridge London, H. M. Johnston, M.D., of Stranorlar, Co. Donegal, to Amy Cordelia, widow of Dr. James Craig, Leicester, and youngest daughter of the late Dr. Snoad, 286 Aylestone Road, Leicester.

McCall—Brown.—On Nov. 19th, at the Burgh Halls, Maxwell Park, Glasgow, Alexander Bowle McCall, M.D., to Ellen (Nettie), daughter of the late T. G. Brown, of Glasgow.

Deaths.

Childs.—On Nov. 23rd, at Torquay, Annie, the wife of Christopher Childs, M.D., of Boscarn, Looe, Cornwall, and daughter of the late J. W. Macrae, Esq., aged 61.

Ellis.—On Nov. 23rd, at Monkendons, Maidenhead, aged 20, Phyllis Edythe, dearly beloved wife of Carlton Atkinson Ellis, F.R.C.S.E., after a long and painful illness.

Peskett.—On Nov. 22nd, at Simla, Halland, Sussex, from pneumonia, Arthur William Chalmers Peskett, M.A., M.B., B.C.Cantab., son of the late Surgeon-Major William Peskett, Indian Army.

Sparke.—On Nov. 22nd, at West Hill, Mansfield, Notts, George Whitefield Sparke, M.R.C.S., L.R.C.P., late Asst.-Surgeon Royal Artillery, youngest son of the late John Guyse Sparke, M.D., R.M., in the 84th year of his age

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

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NOTES AND COMMENTS.

Mr. Lloyd George as Vicarious Philanthropist.

AT Aberdeen last Friday, Mr. Lloyd George entered a vigorous defence of his Insurance Act. He pointed out with vehement force the advantages of his scheme as follows:—"Consumption fought with the whole strength of a great Empire, disease combatted in the lowliest homes, children fed whilst their fathers are fighting death! The first man amongst my foes who has carried a plan through which will assuage such human misery as that, let him cast the first stone." We trust that the Chancellor of the Exchequer does not count the medical profession amongst his enemies, although he himself has certainly forced them into a position of sharp defensive criticism. Medical men will not reject the principles of a measure that makes for the national health, which is the very polestar and inspiration of modern medical science. Mr. Lloyd George has provided a paltry six millions for medical benefits—the price of three ironclads—and a part only of that sum is set aside for medical men. The pay he offers is paltry in return for professional services of a highly skilled and responsible kind. Does the Chancellor realise that the whole of the mighty task of rendering medical aid to the poor of the nation has hitherto been discharged by medical men either gratuitously or at a mean recompense tendered under degrading conditions? Now the State has assumed the burden of responsibility, and on terms that are still scandalously inadequate, seeks to allot compulsorily to other shoulders that portion which deals with medical administration. Why should medical men be the agents of Mr. Lloyd George's vicarious philanthropy? That question the MEDICAL PRESS AND CIRCULAR has been asking, in season and out of season, since his Insurance legislation first saw the light of day.

Metchnikoff on Tubercle Immunisation.

A LARGE audience awaited Professor Metchnikoff last Friday at the Royal Society of Medicine. He discoursed in lucid and polished style upon man's warfare against tuberculosis. It was interesting to hear from this veteran of science an account of his first grim struggle with the disease. At twenty-three years of age he married a lady of the same age, who suffered from consumption. He tended her closely for four years—until she died—but did not contract the disease. This immunity he attributes to the fact that he had in his childhood been inoculated with the infection in a mild form. "Unconscious inoculation," he said, "by mild or benign strains of the tubercle bacillus is known to occur naturally and to lead to immunity." Some assumption of this kind seems necessary to explain the facts presented to us on all sides. The learned Professor did not hesitate to push his view to its logical conclusion, for he claimed that the diminution of the death-rate from tuberculosis in London, Hamburg and Copenhagen was probably due to such immunisation. In a fine peroration he expressed a hope that in the not far distant future the great animal *homo sapiens* would triumph over the microscopic plant *bacillus tuberculosis*.

Tobacco as a Drug.

AN amusing incident has occurred in connection with sanatorium administration in Ireland. It seems that Sir Charles Cameron, the Medical Officer of Dublin, considered tobacco a useful or necessary adjunct in the treatment of a consumptive patient. He generously offered to pay for the tobacco. but the Committee declined his offer, and the patient was supplied with a small supply of tobacco at the expense of the State. A fortnight later the Insurance Commissioners for Ireland wanted to know from what fund the Committee proposed to repay the cost of that particular item. The reply was to the effect that Sir Charles had ordered the tobacco as a useful drug, which was to be found in the "British Pharmacopœia" under the heading of Nicotiana Tabacum. The Insurance Commissioners, after consultation with various eminent lawyers, decided that there was no Statutory authority for the expenditure of money in this particular direction. There the matter stands for the present, but it offers a fine field for future official wrangling. As to tobacco and the Pharmacopœia, it was formerly employed to a limited extent in therapeutics, but it is doubtful whether it is ever so employed at the present day. Still, nothing is impossible to the genius of an Irishman, and we may yet live to see tobacco restored as a useful drug in the treatment of tuberculosis.

The Deadly House Fly.

THE general recognition of the part played by the house fly in the spread of infectious disease is a boon to the public in many ways For one thing it opens their eyes to the nature of disease germs and the devious methods by which they are distributed. Many a household has yet to learn that one of the best ways of ridding a room of flies is to expose a small dish of sweetened milk to which a little 40 per cent. formalin solution has been added. The latest plan of attack is highly scientific and promises to be no less deadly. It is that of inoculating flies with a culture of a microscopic fungus which is extremely fatal to those little pests. The discoverer of this agent is Mr. Hesse, a young student at the Working Men's College, Camden Town. His experiments will, of course, need corroboration before they can be accepted as scientifically correct, but they are based on lines that contain no inherent improbability.

LEADING ARTICLES.

THE GENERAL MEDICAL COUNCIL.

THE presidential address of the General Medical Council, in the hands of Sir Donald MacAlister, is always of interest to the profession, an important part of the affairs of which are entrusted to the management of that body. On the present occasion it dealt with various matters of importance, although it contained no very new or startling propositions. So far as that goes, indeed, it lacked the hint or promise of coming reforms in the Council which to some extent we had become accustomed to under the presidency of Sir Donald. It has long been recognised by medical men that the method of their internal government is cumbrous, antiquated, and ineffectual so far as many of the objects of self-government are concerned, such as, for instance, the protection of the profession against unqualified practice and the carrying out of necessary reform. The constitution of the Council is of a mediæval character which renders it a sort of close corporation representing the interests of a number of corporate qualifying bodies and Crown nominees, together with a trifling and inadequate direct representation of the medical electorate. To keep such a body in touch with the spirit of modern times this constitution would be reversed, and the bulk of the Council would be elected by the medical practitioners of the United Kingdom. It is a matter of wonder how a powerful body of educated men could have so long tolerated the present condition of affairs, and one may hope that when the battle with the Government over the National Insurance Act has been won the profession will turn its newly discovered powers of collective action towards the reform of the General Medical Council. Why should medical men not have a governing body like that of the Incorporated Law Society, with powers of adjusting fees, of administering internal discipline, of prosecuting illegal practitioners, and of defending and advancing their interests generally? Until the Council is recast as a business body on some such practical lines it must continue to fall lamentably and deplorably short of the duties that legitimately appertain to a body holding so high and prominent a position. In answer to pleas for reform the Council has usually fallen back upon the limitation of its statutory powers, whereby it is entrusted with certain specific duties, such as the regulating of medical education, the enforcing of domestic discipline and the maintenance of the *Register*. The close and peculiar relationship of the General Medical Council to the Privy Council, however, confers upon it absolutely unique powers of influencing medical legislation. As a matter of fact that influence has been thus used during the past few months, namely, to secure amending legislation. In the course of his remarks Sir Donald MacAlister reported that in response to suggestions from the Council the Lord President has prepared and introduced into the House of Lords a Bill for amending a few particular sections of the Medical Act, 1886. The proposed change is the election of direct representatives every five years, with details adjusted so as to save the money of the Council. Surely this would have been an unrivalled opportunity for increasing the number of the direct representatives, and for introducing other much-needed reforms. As economy was the avowed object of the Bill, and inadequate income its excuse, there would have been an excellent opening for replenishing and sustaining the exchequer of the Council by altering the terms of registration or by other sound financial steps, such as a tax upon the wealthy licensing bodies. If the measure reaches the Commons we trust it may attract the serious attention of legislators on both sides of the House. Most medical men probably think that the disciplinary powers of the Council are already administered with sufficient stringency. It was announced by the President, however, that the Home Office and the police have now undertaken to communicate to the Council the names of all medical men who come within their official cognisance as offenders. The Council would secure the gratitude of the medical profession were they to devote a little of this Draconian rule to the castigation of those who trespass on the field of legitimate medical practice, and by the stress of their illegal competition drive qualified practitioners into questionable and devious paths. In Canada, as announced by the President, amending medical legislation has been obtained. One great outstanding fact is that a single qualification is to be secured for all the Dominion. Another is that the profession is to be represented adequately by direct election. So far as can be gathered from a glance at a summary of the proposed changes there is no adequate penal power conferred against unqualified practice. It may, perhaps, be assumed, however, that a popularly elected council would sooner or later find means of dealing with that most disturbing and pernicious element of social as well as of professional life. With such an example before it our own General Medical Council might be expected to turn some attention to its own defects, such as the one-portal examination; its constitution; and the lack of protection afforded to the fundamental economic interests of medical practitioners. Individually the Council is composed of men of high standing and of unimpeachable honour, but that fact does not compensate for a conservatism of policy and lack of ideals in a body that holds in the hollow of its hands the future progress and welfare of the medical profession.

LUNACY IN LONDON IN 1911.

THE twenty-third annual report of the Asylums Committee of the London County Council for the year 1911-12, made in pursuance of Section 190 of the Lunacy Act, 1890, has just been issued. It contains much that is of interest to the student of social reform or of eugenics. From the statutory returns made by the various clerks to the various London boards of guardians it appears that on January 1st, 1912, the Council was primarily responsible for finding accommodation for 20,429 persons. This year the increase in the total number of London lunatics is greater than was the case on January 1st, 1911, though the average yearly rate of increase is by no means so high as it once was. In dealing with the question of re-admissions, the report shows how much difficulty is involved in the duty of discharging patients and how great is the responsibility placed upon those who have to decide whether cases are fit for discharge. It is often hard to decide how far continued detention is justified in the case of an apparently cured lunatic when it is practically certain that on his entry into ordinary life his unstable mental equilibrium will speedily become unbalanced again, or in the case of a feeble-minded person, who is quiet and apparently behaves rationally so long as he is subject to the ordered routine of an institution, but who, once he is outside and exposed to the common temptations and irritations which normal individuals can overcome, will exhibit unmistakable evidence of his deficiency. Appeals from friends and considerations of public expense alike are apt to weigh in favour of discharge. Experience, however, shows that it is not always the wisest course, even on the ground of expense, or the kindest, to discharge. It is clearly to the public interest, so far as the law permits, to keep in detention a feeble-minded person who is a potential nuisance to society and a probable source of further burdens on the rates. The fact seems to be that the majority of the patients in asylums nowadays—whatever may have been the case in former times—are not, in a true sense "curable" cases. There is a large and increasing percentage of cases in which there is an unfavourable prospect of recovery. The sub-committee appointed a year ago to consider and report upon the question of the relation of heredity to lunacy is still pursuing its investigations. The three principal causes that are alleged to have led to the admission of three thousand patients into the ten asylums of the Council are hereditary insanity, mental stress, and alcohol. Epilepsy, physical privation and injury are also responsible for many of the cases. According to the report of Dr. F. W. Mott, F.R.S., the Director of the Pathological Laboratory and Pathologist of the London County Asylums, the scientific work achieved during the year has maintained its usual high standard, many valuable publications having been made upon nervous and mental disease, and it is noteworthy that considerable attention has been paid to the results obtained by the Wassermann reaction in general paralysis of the insane. Recent work has been directed to the comparative value of the reaction on the blood serum in this disease; the results have shown that a positive reaction can be obtained with the serum in practically the same proportion of cases as with the cerebro-spinal fluid. This also shows that the serum reaction is of great value in the diagnosis of general paralysis, for should a case of suspected general paralysis fail to give the reaction with the blood, the case may for all practical purposes be dismissed as free from this disease, and the patient thereby saved the inconvenience of lumbar puncture for the withdrawal of cerebro-spinal fluid. During the course of this investigation, particular attention has been paid to the details of the *technique*. The original *technique*, as devised by Professor Wassermann, has been followed to the exclusion of all suggested modifications, the majority of which have been found quite unreliable. Experience seems to show that the delicacy of the test depends on the accurate standardisation of the reagents used, especially in the case of the liver extract. It is satisfactory to note that the improvement in the condition of the asylums as regards dysentery has been maintained during the past year. The incidence of tuberculosis does not show much variation from year to year, but the figure, 1.92 per cent., is not large. The value of music, and especially of choral singing, in asylum therapeutics is fully recognised by most, if not all, of the various superintendents. In connection with the all-important question of the prophylaxis of insanity, the Medical Superintendent of Horton Asylum, Dr. John R. Lord, makes the following pertinent remarks with which we conclude:—"Insanity is often a retribution for the sins and lack of wisdom of men and women alike. Syphilis and alcoholic excesses are preventable, and a community which allows of imbeciles, criminals, and degenerates being at large and mating deserves all the punishment it gets. I am one of those who recognise the impracticability of surgical eugenics. I doubt its efficacy without exterminating a large proportion of the human race. A study of heredity shows clearly that the sane members of a neurotic stock are as dangerous to succeeding generations as the insane, while great minds and powerful personalities are often blood relations to social weeds. This is no excuse, however, for inactivity; some of the gross conditions associated with reproduction of the species should be tackled. Sterilisation should be put on the same legal footing as abortion. It is the mating of degenerate with degenerate that does the greatest harm and which occurs so frequently. Imbeciles and feeble-minded persons should be segregated, not only for the good of the race but from pure humanity, to remove them from suffering, poverty and crime. The general public will never sanction too much interference with the liberty of the subject, but two things are practicable and should meet with a large measure of approval. The first is the retention of control of feeble-minded children after the age of sixteen, for life if necessary, and secondly, measures to prevent men and women entering into the marriage contract without being informed of the existence of previous insanity, hereditary and communicable disease, etc. These should be made the subject of statutory declaration prior to marriage. They could not be made a bar to marriage in the present state of public opinion, but unsuitable and disastrous marriages would often not be undertaken as they are now through sheer ignorance."

CURRENT TOPICS.

Medical Men and the Royal Society.

At the customary anniversary meeting and dinner of the Royal Society on Saturday (St. Andrew's Day) last, an interesting account was given by Sir Rickman Godlee, President of the Royal College of Surgeons of England, of the relations of the Society to medicine. Not a few members of the medical profession enjoy, and have enjoyed, the distinction of Fellowship of the Royal Society, an honour which stamps its possessor as one who has directly contributed to the sum total of scientific knowledge. A considerable proportion of medical men were included among the founders of the Society itself, while among the distinguished men who have occupied the presidential chair, five were members of the profession. The first was the celebrated Sir Hans Sloane, who was president in 1727. The next was Sir John Pringle in 1772, who was the greatest authority on military medicine and hygiene, and published many works on those subjects and some on gaol fever and the plague. Then came Sir Benjamin Brodie, 1858, who, while essentially a surgeon, did some valuable scientific work in physiology and comparative anatomy. Huxley was president from 1883 to 1885, and no one who had ever heard Huxley could forget the flow of perfect English in which he brought forward his entrancing subjects. Finally there was Lord Lister, who was president from 1895 to 1900. By such intellectual giants as these the medical profession has been represented in an official capacity upon the most important scientific body in the world.

The Incidence of Ophthalmia Neonatorum in Scotland.

In 1907 the British Medical Association appointed a committee to investigate and report upon the prevalence and prevention of ophthalmia neonatorum in the United Kingdom. This report was issued in 1909. Among its conclusions was that this affection accounts for upwards of 10 per cent. of all cases of blindness. Dr. Thomas F. Dewar has been engaged in a similar enquiry as regards the chief centres of population in Scotland. In his report, recently presented to the Local Government Board for Scotland, it is concluded that ophthalmia neonatorum is less prevalent than it was 25 or even ten years ago; that actual loss of vision from this cause is less frequent than heretofore all are agreed. Nevertheless, the disease is not so uncommon, nor grave impairment of vision as an effect of it so rare, that it can be regarded lightly or with indifference. It would appear that at the present time about 500 cases occur annually in Scotland, and that of these 30 to 40 suffer some impairment of vision, and 5 to 10 become economically blind. These figures probably understate rather than exaggerate the truth. Dr. Dewar is of the opinion that if the facts regarding the prevalence, preventability, and dire results of ophthalmia neonatorum were brought prominently to the notice of local authorities, further action, based upon the circumstances and needs of each area, might well be left to the initiative of the local authorities themselves. The general opinion has been expressed that apart from or in addition to, statutory notification of ophthalmia neonatorum, much might be done to restrict its incidence and still more to control its ravages, were a Midwives Act for Scotland (on lines generally resembling the English Act) to be passed by Parliament.

The Little Green Devil.

Since the first of October absinthe may no longer be imported into the United States of America. Although we are rather ready to look upon certain types of American legislation as experimental and connected with the scare waves that periodically pass over that continent, yet this time the Solons of the Senate are "making good." If an appreciable quantity of absinthe is introduced into any country, it is high time for the law to step in and crush the insinuating invader before he has time to grip the country in his beautiful green coils. More absinthe is consumed in France than in all the rest of the world, and lay and scientific opinion is seriously perturbed about the effect of this consumption on the manhood of the race; moreover, it was only at the end of the Algerian War that this alluring drink was first introduced. In making absinthe, besides the chief ingredient—wormwood, other essences and extracts are added, some alcoholic and some not, and a *soupçon* of opium caps the savoury mess. Absinthe's chief power for evil lies in the fact that its effects are confined almost solely to the nervous system. First nerves and then brain fall under the spell. A man may have two or three glasses and go about his business free from all effect for hours, and then suddenly he may become irritated, melancholy, seeing visions, and dreaming dreams. Terrifying hallucinations are his lot till he has worked off the effects of the drug, and then he hears again the irresistible call of the little green demon that sits in the glass. At first the drink is taken with the big French slabs of sugar and well diluted, but absinthe makes the heart grow fonder, and your real devotee takes it neat. In these countries absinthe is fortunately left alone. It may be that our lumps of sugar are not adapted for the iridescent dropping that is the absinthe fiend's only æsthetic pleasure, or it may be that our love for other intoxicants is too strong. In this respect as in most things, abstinence is as easy as temperance is difficult.

The Doctor's Car.

The Olympia Show has turned our fancy to thoughts of motors and such like things. With such a display of all that is latest and best—it were a heresy if in this connection we did not consider the two terms synonymous—in the land of the automobile, we wonder why the more pre-historic types of vehicle are still on the road. The pity is that a super-abundant percentage of these rattle-traps is owned by the medical profession. In country districts the doctor's car is often known by the noise it makes. A man who will have straw laid in the street to protect his patient from the noise of the harmless necessary cart, will not hesitate to drive up to the very door in a car to describe which Virgil might easily have altered his onomatopœic hexameter to—*quadrurotante putrem sonitu quatit machina campum*. Why the doctor should be satisfied with a shabby noise-machine when four-cylindered ghosts are so cheap it is hard to say. If he would drive his dull car away to the scrap heap, and indulge in one of the silent beauties that are now so cheap, he would find that his nerves, his practice, and his æsthetic sense would reap benefit. Just at present we fear, however, that few medical men care to lay out the price of a new car, though with the advent of a new type of vehicle, the cyclecar, it is probable that automobilism will become more popular than ever among those who previously demurred on the grounds of expense.

The Medical Profession and the Home Rule Bill.

In his opening address to the General Medical Council the other day, the President, Sir Donald MacAlister, stated that no reply had yet been received from the Government to the resolution of the Council, asking that legislation relating to the Medical and Dentists Acts should, in the Home Rule Bill, be reserved to the Imperial Parliament. In the meantime the Bill is going rapidly through Committee, and no one knows whether the Government has adopted the view of the General Medical Council or not. The matter is of considerable importance, as it would be highly inconvenient to have multiple authorities set up in these countries for the keeping of separate medical registers. We are not, of course, making any suggestion that the standard which might be adopted by one registering authority might vary from that set by another. Separate authorities would, however, lead to manifold inconveniences. The point is, we believe, non-controversial, and we cannot understand why the Government has not adopted the suggestion of the General Medical Council.

The Treatment of Nile Boils.

The special type of boil known as "Nile Boil," not to be confounded with "Bouton de Nil," a totally different affection, derives its name from the fact that its occurrence usually coincides with the time that the Nile is rising or in flood. An interesting account of the condition is given by Capt. R. G. Archibald, M.B., R.A.M.C. (a) Pathologist and Assistant Bacteriologist to the Wellcome Tropical Research Laboratories, Khartoum, who has had special opportunities for studying it during the last four years. Europeans and natives of Egypt are affected alike, men being attacked more frequently than women. The earliest lesion starts at the base of a hair-follicle as a painful, red spot. Suppuration occurs in two or three days' time, and after incision and separation of the slough the surrounding tissues are seen to be much undermined. Single boils rarely exist, others occurring near the original one or in distant parts of the body. Staphylococci are the cause of Nile boil, mixed infections never having been observed. Fomentations and incisions are only of temporary benefit and do not prevent the condition from recurring. The treatment which has given the best results is vaccine-therapy by means of an autogenous vaccine. 250 million are injected as an initial dose, followed, four days afterwards, by a dose of 500 million and then a weekly injection of 500 million until six doses in all have been administered. By this means it is stated that an assurance can be given of a certain and successful cure.

PERSONAL.

Mr. Austen Chamberlain has received £500 from the British India Steam Navigation Company towards the fund of £100,000 which he is raising for the London School of Tropical Medicine.

Mr. A. L. Candler, M.B., B.S., F.R.C.S., has been appointed Medical Officer to the Exeter Dispensary.

Dr. O. A. J. N. Muriset, of Edinburgh, has been appointed Chief Tuberculosis Officer for Northamptontonshire.

Col. H. O. Trevor, R.A.M.C., has taken up duty as Assistant Director of Medical Services at Headquarters of the Cork District.

Dr. C. Wilfred Vining, M.D., B.S.Lond., M.R.C.P.Lond., D.P.H., has been appointed Honorary Physician to the Leeds Public Dispensary.

Dr. Hugh Morton, M.D.Glas., has been appointed Extra Honorary Physician at the Dispensary, Royal Hospital for Sick Children, Glasgow.

Dr. H. Neville Crowe, M.B., Ch.B.Birm., L.R.C.P., M.R.C.S., has been appointed Honorary Physician to the Worcester General Infirmary.

Dr. John A. Watt, M.B., Ch.B., D.P.H.Aberd., has been appointed Assistant County Medical Officer and Tuberculosis Officer to the Derbyshire County Council.

The following members of the medical profession have been called to the Bar:—J. M. Acland, M.D., M.R.C.S., L.R.C.P. (Lincoln's Inn); G. C. Hancock, M.R.C.S., L.R.C.P.; O. Hall, L.R.C.P., L.R.C.S. (Middle Temple).

Dr. Peter Fraser, who gave up an appointment worth £800 a year some years ago in order that he and his wife might devote themselves to missionary work at Lushai, India, has now returned to this country consequent upon ill-health. He will take up his residence at Hemllan, Denbigh.

Dr. R. Stenhouse Williams, who has accomplished much valuable work in public health and bacteriology at Liverpool, is about to sever his connection with the University of Liverpool to take up an appointment under the Board of Agriculture, with headquarters at University College, Reading.

The new pharmacology laboratories at University College, built by the generosity of Mr. Andrew Carnegie, will be opened by the President of the Royal College of Physicians, Sir Thomas Barlow, on Wednesday, December 4th. Lord Reay, Chairman of the College Committee, will preside, and the Vice-Chancellor of the University of London, Dr. W. P. Herringham, has promised to be present.

The Paul Philip Reitlinger Prize, offered this year for an essay embodying the result of some research work on a medical subject, has been awarded to Frederick James Fitzmaurice Barrington, M.S., University College Hospital Medical School, for an essay on "The Innervation of the Bulbo-urethral Glands, and their Histological Changes during Activity."

The Lord Mayor will open the annual conference of the National Association for the Feeble-minded to be held at the Guildhall on December 13th, when the subject for discussion will be "Legislation for the Feeble-minded," and papers will be read on "The Administrative Question" and "The Position of the Feeble-minded under the Government Bill." The chair will be taken by Mr. W. H. Dickinson, M.P.

Surg.-General Christopher Pearson has been appointed Honorary Physician to the King in the vacancy caused by the death of Inspector-General of Hospitals and Fleets Sir Herbert Mackay Ellis. Dr. Pearson was Surgeon of the *Invincible* during the bombardment of Alexandria, and served throughout the naval phase of the Egyptian war. He joined the Service in 1875, and is the senior man on the active list of the Medical Branch.

(a) *Journal of Vaccine Therapy*, November, 1912.

A CLINICAL LECTURE
ON
SOME THERAPEUTIC POINTS.

By HERBERT FRENCH, M.A., M.D.Oxon., F.R.C.P.Lond.,

Assistant Physician, Pathologist and Lecturer, Guy's Hospital, London.

The points that I hope to discuss constitute a continuation of a paper read before the Woolwich Medico-Chirurgical Society at Easter this year, and published in The Medical Press and Circular, May 1st, 1912. As on that occasion, so now, I must apologise if the different parts of it seem to you too disjointed. The different therapeutic points that I wish to bring before you have no connection with one another; many of them are far from new, but I think they all merit attention on account of their utility in practice. The first point is:

The Value of Adrenalin Chloride Applied Locally in the Treatment of Graves's Disease.

There is probably no malady in which a greater diversity of treatment has been and is adopted by different authorities; in no malady is the probable course of the disease and the ultimate prognosis in any particular case more difficult to assess; in no malady, therefore, is it more difficult to convince one's self and others as to whether the treatment that is adopted is itself really doing good or whether the improvement would not have come about equally well if other measures had been adopted, or even no measures at all. Nowadays I suppose the first thing which has to be decided in one's own mind is whether one should advise Kocher's operative treatment as a routine or not, and every man must formulate his own opinion for himself upon this point. If I were to place myself in the position of a patient suffering from ordinary Graves's disease and my medical man were to advise me to have it treated by removal of part of the gland, I should not be content with his telling me that a great many patients are cured by the operation; I should want him to be able to say that I was almost certainly not one of the kind likely to succumb to the operation itself. Now, so far as I have been able to judge, there are no criteria yet known by which we can say that any particular individual suffering from Graves's disease can certainly be operated upon without the risk of death soon after the operation, apparently from fulminating thyroid poisoning, or something of that kind. This being so, if I were the patient I would rather have other measures than surgical ones tried in the first instance. Amongst those which have done undoubted good in many cases may be mentioned the use of the X-rays locally to the gland; various forms of electrical treatment, particularly the interrupted galvanic current, one pole of the battery being over the thyroid gland region of the front of the neck, the other over the upper dorsal spines posteriorly; and simple treatment by rest in bed and feeding up without the administration of any particular drugs. The great value of rest in bed and a liberal dietary in acute cases is well known, but it is seldom possible to continue the rest in bed until a stage even approaching cure has been reached. As a rule, the rest can be continued until the acute progress of the malady has been arrested, but presently the patient has to be allowed up, notwithstanding the fact that the disease is still present, and then it is that the practitioner in charge of the case finds the need of resorting to all kinds of remedies and different therapeutic measures in the hope of making the malady retrogress still further. The number of different drugs that have been given internally to patients who have become much better, or even perfectly well, *post hoc*, if not *propter hoc*, is very great; so great indeed, that it seems likely that the drugs themselves were not the cause of the recovery. The use of the milk of thyroidectomised goats, or the oral administration of hypodermic injection of serum from similar animals has proved disappointing in practice. Treatment by the injection of hot paraffin or boiling water into the gland in the hope of causing some of the parenchyma to atrophy as the result of the inflammatory changes so produced has not yet been given a very general trial. I have not space here even to quote all the various other lines of treatment that have been resorted to. I should like to mention one in particular, however, which, though it may not relieve all cases, has certainly seemed to be the direct cause of the improvement in some who have previously resisted a large number of other kinds of non-surgical treatment: and this is by means of the local application of a solution of adrenalin chloride to the neck over the region of the thyroid gland.

My attention was first drawn to it by my friend Fleet-Surgeon Dawe, but I am not sure whether I use the preparation in the same way that he did in his cases. I employ the ordinary solution of adrenalin chloride in the strength of 1 part in 1,000, applied on a piece of ordinary lint folded double and of sufficient size to cover the font of the neck from the hyoid bone above to the top of the manubrium sterni below and extending laterally to a line drawn vertically downwards from the ear on each side. Just enough of the solution is used to moisten the lint without making it drip; there is probably no reason why more of it should not be employed at a time if it were not for its expense; the cost, indeed, is the chief objection to the treatment. There seems, again, to be no reason why the lint thus steeped in adrenalin chloride solution should not be renewed twice or three times in the twenty-four hours and applied continuously, but as patients who are up and about do not as a rule like applications to their throats during the daytime, one's ordinary habit is to prescribe the application at night only. The lint is covered with gutta-percha tissue and the latter kept on with a suitable neckband or bandage; it is generally advisable to pin the latter to the neck of the nightgown, so as to prevent the whole application from twisting round the neck and becoming altogether displaced from the thyroid gland region during the night. As a rule, one also prescribes extract of malt and iron in two-drachm doses three times a day; the type of malt and iron that I personally prefer is that which is made up by dissolving two parts of pyrophosphate of iron in three parts of water and then mixing this with 95 parts of thick, dark extract of malt.

It is impossible to give statistical proof of the value of this treatment; one is obliged to be guided by personal opinion, and I quite agree that this is unsatisfactoy, because one cannot help being biassed. Nevertheless, from experience, both in the out-patient department of the hospital, and amongst others who are better-to-do, one can assert with certainty that no ill effects accrue from it and that, so far, one is strongly of opinion that the patients tend to increase in weight, diminish in nervousness and to improve in general health under this treatment, even when other measures have been tried and have failed; and amongst out-patients this applies even to patients who, on account of the need to continue earning a wage, have been unable to rest up in bed even for a time, but have had to continue working at occupations which have been either physically or mentally laborious—typewriting, for instance, or clerking, or as a factory hand, and so forth. One does not claim that it is more than a palliative remedy, but it is certainly one that may be worth while knowing of and trying in some, if not all, cases of Graves's disease.

The next point that I should like to remind you of is

The Value of Very Simple Co-ordinating Exercises in the Treatment of Ataxia,

especially that variety which occurs in tabes dorsalis. Many a patient suffering from this disease becomes bedridden, or, at any rate, confined to a chair or couch long before he need have been had he been taught to practise simple co-ordination, especially with his legs, in the earlier stages of the malady. This point was first proved by German physicians; it is beginning to be known in England, but knowledge of it is not nearly so widespread as it might well be. A Bristol publishing firm have issued at the price of half-a-guinea a sort of draught-board with circular and diagonal lines and a booklet of directions by means of which the patient can be taught to practise co-ordinating movements with his feet; but there is no need whatever for any complicated diagrams or apparatus. If the underlying principle of the treatment is understood each of us can devise simple exercises which may be varied week by week or month by month, the patient's interest in them being thereby maintained, though care should be taken to keep them simple, and not make them either long or complex. It is important to bear in mind always that the exercises are not required for the purpose of increasing the strength of the individual muscles, for this is already good as a rule, except in quite a late stage of tabes; the purpose of the exercises should be to call for as little fatiguing effort as possible, but a maximum of precision necessitating the co-ordinated use of opposing groups of muscles. It is easier to demonstrate two or three simple movements than it is to describe them. One of the simplest is to have four or five pennies or small pieces of paper and to throw them upon the floor at hazard in front of the patient's feet within easy reach, but not too close together. If his ataxy is considerable he may be seated in a chair; if he can manage the movements standing up, so much the better, and if need be he can use a stick or the back of a chair as a support; or he may practise the movements first sitting, then standing. In order to touch each coin in succession accurately with the point of his shoe, or with his big toe, if his foot is bare, he will bring into play most of the muscles of his thigh, leg and foot; and if the movement is continued accurately a marked degree of co-ordination is required. When the patient is already ataxic he will touch each coin clumsily, or may put his toe down not on the coin at all, but somewhere on the floor near it; by practice, however, he will re-co-ordinate the movements of the leg and foot muscles until presently his coin-touching efforts will be much more precise and accurate than they were to start with. By varying the position of the coins, or by varying the order in which they are touched, sometimes numbering them from left to right, sometimes from right to left, sometimes touching them not in the order 1, 2, 3, 4, but in the order 1, 3, 2, 4, or 1, 4, 3, 2, and so forth, it is possible by means of this simple device and without any costly apparatus to do a great deal towards staving off the time when the patient will no longer be able to walk. It has been estimated that as much as ten years can be added to some of these patients' lives in this way. It should always be insisted upon that the patient must not go on with the movements at any one time so long as to make his limb fatigued. Their purpose is not to cultivate physical strength, but to teach the muscles once more how to act together to the best advantage; it is a great deal better to practise the co-ordinating movements for two or three minutes at a time half-a-dozen times a day than it is to have a longer and more fatiguing *séance* all at one time.

Another very simple exercise which these patients may undertake is for them to stand with their feet sufficiently far apart to prevent their tumbling over, and then to practise rising, not suddenly or quickly, but slowly and steadily from the level foot on to the tips of the toes, and then, not to drop suddenly down on the heel again, but to go down slowly, and with precision, from the tip-toe position until the heel once more touches the floor. At first some of the patients will find this a very difficult movement, and it may be necessary for them to hold on to a chair-back or something of that kind to prevent their falling over in their efforts to rise slowly on to tip-toe, but later the power of co-ordinating the different muscles concerned in the act very often becomes wonderfully restored even when the first attempts seemed absolutely hopeless.

A third kind of co-ordinating exercise which interests these patients is for them to stand—at first holding on to a chair-back or other support, but later with no support at all—and to raise one foot off the floor and place it with as much precision as possible on a marked spot on the seat of a chair; and then, after a pause, to raise it from the seat of the chair and to replace it, not with a sudden drop, but with a steady downward movement on to the floor. Each such exercise may be repeated with each foot in turn, and there is a certain amount of co-ordinating effort demanded of the passive leg and foot each time, as well as of the one that is being raised on to the chair. If the patient is already so ataxic that he cannot raise the foot so high as on to an ordinary chair-seat, something less high may be used instead—a footstool or a box, for example.

It is clearly easy to devise a great variety of other different movements of a similar kind, all having the same purpose, namely, the re-education of the power of co-ordination in the legs; and the trouble taken in this direction in cases of tabes dorsalis, disseminated sclerosis, ataxic paraplegia and other affections associated with ataxy is well worth while and well repaid by the improvement in the patient's power of standing and of walking in many cases.

The next therapeutic point that I should like to refer to is a very simple one indeed, but again and again it has proved extremely useful. It may be labelled

The Open-eye Treatment of Simple Insomnia.

I have no idea to whom we owe the first insistence upon this point, but I have found that patients are very seldom told about it, so that one cannot but think that its importance is realised too little.

When, without obvious external cause, such as too close a room, too many bed-clothes, or too few, a visceral pain, or some other cause of that kind, a person cannot get to sleep at night on account of what is generally called "simple insomnia," in the great majority of instances he lies in bed with his eyes tightly closed, restlessly rolling from side to side with all kinds of thoughts streaming through his mind and keeping him awake. It has always been an impossibility to me personally to count imaginary sheep passing through a gap in the hedge or to make any of the similar concentrated mental efforts that are so often prescribed; but I have always found it very easy, to begin with at any rate, to lie with my eyes wide open and, if possible, fixed upon some definite part of the ceiling or window, or other point that may be just visible. In a very short time an increasing difficulty in keeping the eyelids up develops; the lids become heavy, but if one still persists in opening them to look again at the chosen spot as often as they tend to shut, it is surprising how soon oblivion supervenes; there are few things so soporific as a fixed intention to keep awake when one is in the dark, especially if the effort in that direction is accompanied by insistence upon keeping the eyelids open. Most patients are surprised at being advised to do what seems to them in the first instance the very opposite of what would appear the best course to follow, but when they try the effect they are generally delighted with it.

One other great point about simple insomnia is that it is seldom the insomnia itself which does so much harm as does the worrying at the fact of not being asleep. The individual lies in bed making a forced effort to sleep, and saying to himself how annoying it is his not sleeping like this; he has come to bed with the special object of getting a good night's rest, because he knows he has a heavy day's work to-morrow; and now he cannot sleep. In a few minutes this worry grows upon him so much that he rolls from his right side over on to his left, and tries again in this new position. Before this has been given a proper trial he has decided that he will roll right over. And so he goes on; his restlessness increases, and by simply worrying at not sleeping he may successfully keep himself awake for two or three hours or longer. Many such patients have derived immense benefit from being told that the tired feeling next day is due to the worry at not sleeping more than to the not sleeping itself. It is possible to cultivate a sense of calm which assists the cure of insomnia without the use of any drugs. A man may lie awake all night and it will do him no particular harm if he does not worry at it. If he persuades himself fully of this point and prepares to lie awake placidly all night he will often fall asleep in quite a short time, and much to his own surprise, especially if he adopts the "open-eye" remedy soon after he finds that he is not falling asleep in the ordinary way.

The next therapeutic point which I should like to draw your attention to is

The Value of the Skipping Rope in the Treatment of Chronic Constipation.

A very great deal of what may be called "chronic simple constipation" is actually the product of treatment by medical men; it is so easy to prescribe a laxative, or, worse still, a purge, for a patient who complains that he is liverish and that his bowels do not act as well as he would like them to. The prescription is apt to be repeated. The patient may even be given a supply of pills to keep by him, one or two to be taken when he feels he needs them. The habit of taking them grows. Patients themselves often take purges in the form of proprietary pills without advice, and get into the way of depending upon them. Some parents prescribe purges for their children with too little thought. I do not wish to go into this point in all the detail that I should like, but I feel very strongly upon the subject of the abuse of purgatives, and the tremendous amount of constipation and worse results that develop from it. I am accustomed to say that many persons who begin with cascara sagrada or Epsom salts at fifteen years of age have to take to calomel or podophyllum or something stronger at twenty-five or thirty, and have to increase the dose and the strength of what they need to move the bowels year by year until, figuratively speaking, in many instances at forty or forty-five gunpowder will hardly do it. This, of course, overstates the case except in the rarer instances, but there can be no doubt that a very great deal of chronic constipation, intestinal toxæmia and the protean results of this can be directly traced to the treatment of simple constipation by purgatives without first trying non-medicinal means. The first and most important of the latter is what may be called for short the cultivation of the regular habit, the patient trying to have his bowels moved each day immediately after breakfast, or at some other time if more convenient, but, as far as possible, at the same time each day, until the bowels begin to get into the habit of wanting to be moved at this time rather than at any other. There are various ways of assisting the re-development of the diurnal habit of the colon; these have been ably discussed by Sir James Sawyer, M.D., F.R.C.P., F.R.S.Ed., in his work entitled "Practical Medicine." I wish, however, to lay particular stress upon one very simple accessory means of relieving chronic constipation, and that is the use of the skipping rope for sixty seconds after the bath in the morning, and, if need be, for another sixty seconds at some other period of the day. The vigorous jolting movements given to the whole body, the increased respiratory movements, the increased action of the heart and the exercise given to the vaso-motor system in controlling the alterations in the blood supply produced by the exercise are all beneficial, except under exceptional circumstances, such as definite heart disease and the like, but over and above this it seems probable that every time the patient skips over the rope, thus raising his legs off the floor, the sudden sharp contractions of the psoas and iliacus muscles directly influence the colon in front of them and thus assist the activity of the latter, possibly increasing peristalsis, especially in the cæcum and in the sigmoid colon. Very frequently the effort of skipping even for so short a time as sixty seconds causes flatus to be passed, showing that the movements have an immediate effect upon the bowel contents. The exercise occupies so short a time that it can be continued daily without any particular inconvenience or without its being omitted on account of its complexity or duration. Many individuals who have been sufferers from chronic constipation have found that the use of the skipping rope in this way in addition to the cultivation of the regular diurnal habit cures habitual constipation without the need for resorting to purgatives at all.

(To be concluded in our next.)

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by Herbert French, M.A., M.D. Oxon., F.R.C.P.Lond., Assistant Physician, Pathologist and Lecturer to Guy's Hospital. Subject: "Some Therapeutic Points."—conclusion.*

ORIGINAL PAPERS.

THE NEUROLOGY OF THE VISUAL SYSTEM.

A Short Series of Original Papers.

By HARRY CAMPBELL, M.D., F.R.C.P.,
Physician to the West End Hospital for Diseases of the Nervous System.

PAPER III.

B.—LESION CAUSING HEMIOPIC EFFECTS.

We have next to consider the lesions which cause hemiopic effects, paralytic (hemianopia) and irritative (hemiopic visual sensations and hallucinations). The latter only occur when the lesion is in or near the cortex. When the lesion involves the chiasma, the blindness may affect both temporal or both nasal halves of the retina, or one temporal or one nasal half. When, however, a destructive lesion involves the hemiopic tract behind the chiasma, it always causes blindness in the corresponding half of each retina (homolateral hemianopia). When, *e.g.*, any part of the right hemiopic tract is destroyed, blindness of the right half of each retina occurs. Inasmuch as this causes blindness in the left half of the visual field, it is spoken of as "left hemianopia." Similarly, blindness of the nasal half of each retina is known as "temporal hemianopia"; and blindness of the temporal half of each retina as "nasal hemianopia." [These two forms are sometimes termed heterolateral hemianopia.]

The hemianopic patient may be unconscious of his defect. When conscious of it, he often thinks he is blind in one eye—the eye, *i.e.*, on the side of the blind half of the visual field. In right-sided hemianopia reading is difficult: the patient can see the word he fixes, but not the following one. In left-sided hemianopia, the reading of a single line is easy, but it is difficult to pass from one line to the next. In hemianopia, no reflex blinking occurs on suddenly introducing an object, say, the point of a finger, into the blind portion of the field. A patient with homolateral hemianopia asked to bisect a straight line drawn on a piece of paper, makes the portion corresponding to the blind side the larger.

Lesions of the chiasma.—In these lesions there is often evidence of optic atrophy. Destructive lesions give rise to heterolateral hemianopias, as indicated by Fig. 11. A lesion at *a* causes unilateral nasal hemianopia. A lesion involving *a* and *a*¹ causes bilateral nasal hemianopia (Fig. 12). A lesion at *b* causes bi-temporal hemianopia.

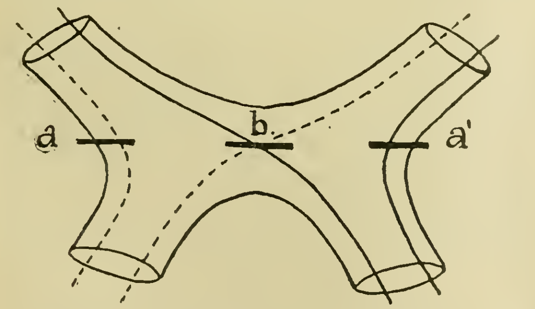

FIG. 11.—Lesions in optic commissure.

A lesion involving *a* (or *a*¹) and *b* causes blindness of one eye and temporal hemianopia of the other. Of these, the last two are the most common. In bi-temporal hemianopia the visual difficulty is greater than in the bi-nasal variety, inasmuch as the temporal visual fields are more extensive than the nasal.

The chiasma may be damaged from lesion of the pituitary body (as in acromegaly), the sella turcica, the base of the brain, or of the chiasma itself, or from fracture of the base of the skull. The pial investment of the chiasma is apt to be involved in tubercle, gumma, gummatous meningitis, and epidemic cerebro-spinal meningitis. Since the recesses of the third ventricle overlie the chiasma, any increase of fluid pressure within this chamber may press upon the chiasma. The increased intra-ventricular pressure which may result from cerebral tumour is a frequent cause of visual defect in this disease.

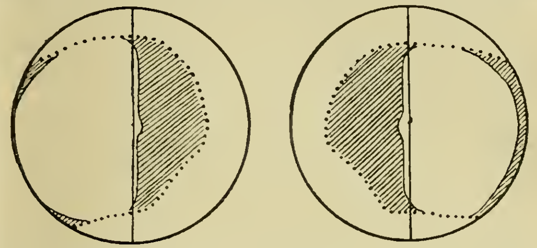

FIG. 12.—Bilateral nasal hemianopia. Observe that the blindness does not extend up to the middle line.

Destructive lesions of any part of one hemiopic tract (See Fig. 10) behind the chiasma (*i.e.*, the optic tract, the external corpus geniculatum, pulvinar, the retro-lenticular portion of the internal capsule, the optic radiations, and the hemiopic cortex) cause homolateral hemianopia: there is blindness in the corresponding half of each retina, so that the patient is blind as regards the opposite half of the visual field. Lesions of the pulvinar are said to cause hemianopia.

Lesions of the optic tract.—Lesions of the optic tract, like those of the chiasma and optic nerves, may give rise to optic atrophy. It is rare to find isolated lesions of the tract, which is more likely to be affected in conjunction with the chiasma, the corpora geniculata, the corpora quadrigemina, and the thalamus. It is supplied by small end-arteries, and blockage of them may cause hemianopia. The central end is relatively often involved in softening, together with the corpora quadrigemina and the geniculate bodies. The tract may be pressed upon by tumours, especially those involving the temporal lobe; or tumours may grow from the tract itself.

Besides causing hemianopia, lesions of the optic tract give rise to hemiopic loss of light reflex (Wernicke's sign). These lesions often involve the ocular nerves, sometimes even the fifth and the seventh, the resulting paralysis or anæsthesia being on the side opposite to the hemianopia. Hemiplegia and hemianæsthesia are rare.

Lesions of the external geniculate body.—Hemianopia has been known to result from disease of this structure. Some observers contend that the retinal fibres preserve their relative position as far as the external geniculate bodies, but no further. According to Henchen, a lesion in the superior parts of one corpus genic. ext. gives rise to a scotoma in the lower part of the visual field, and a lesion in its inferior part to a scotoma in the upper part of the field.

Lesions of the retro-lenticular portion of the internal capsule.—The hemianopia resulting from lesions here is often accompanied by hemiplegia with hemianæsthesia. The hemianopia may be permanent, but transient hemianopia is not infrequent after a stroke. In the hemianopia accompanying hemiplegia the patient cannot see on the paralysed side. If the lesion is on the left side there may likewise be word-blindness (from involvement of the angular gyrus). All varieties of aphasia may, however, accompany hemianopia. The most frequent lesions in this region, as well as in the optic radiations and the hemiopic cortex are: hæmorrhage, softening, and tumours.

Lesions of the optic radiations and the hemiopic cortex.—These constitute the commonest causes of hemianopia. This results most frequently from lesions in the cortex, and next in frequence as a cause come lesions in the optic radiations. In either case the usual lesion is softening (*e.g.*, from endarteritis). The hemiopic cortex is supplied by the occipital artery, more especially by its third branch. Transient hemianopia may result from lesions in the neighbourhood of these parts.

Sudden cortical hemianopia is not rare in connection with vascular lesions. The occurrence of bilateral cortical hemianopia is facilitated by the juxtaposition of the two hemiopic areas which face one another. This renders the two liable to be involved in a single lesion. They may also be affected by consecutive lesions.

Quadrantic hemianopia (*i.e.*, blindness in symmetrical quadrants, or even sexants, in the corresponding half of each retina) may result from a lesion in the hemiopic cortex or subjacent radiations suggesting that the visual fibres maintain a definite relation to one another in the radiations and the cortex, the retina being as it were projected on to the cortex. Thus a lesion in the upper lip of the calcarine fissure (*i.e.*, in the cuneus) is said to cause upper quadrant blindness of the retina (lower segment of the visual field); one in the lower lip, lower quadrant blindness of the retina (upper segment of the visual field). A double quadrant blindness from bilateral cortical lesion would cause a horizontal hemianopia. No such case has been verified *post mortem*. This rare form of hemianopia has also been attributed to a symmetrical lesion of the optic nerve fibres.

Cases of hemi-achromatopsia and hemi-dyschromatopsia have been described in connection with cortical lesions, and Ethridge Green has postulated two distinct centres in the occipital lobes—one for colour and the other for simple luminosity. There may be either a weakening of colour vision generally, or blindness as regards special colours, *e.g.*, red and green, and less frequently, yellow and blue. Some doubt the existence of genuine hemi-achromatopsia, attributing the reputed cases to incomplete hemianopia.

With hemianopia (especially when right-sided) there may be dyschromatopsia in the retained halves of the visual field.

An irritative lesion in the hemiopic cortex may give rise to hemiopic sensations and hallucinations, which are referred to the blind side of the visual field.

The visual field in homolateral hemianopia.—Macular vision is practically always retained. When the lesion involves the optic tract it may happen (very rarely) that the mesial margin of the blind area passes through the macula. Generally, however, it falls short of this.

The retention of vision in the central part of the field in homolateral hemianopia is explicable on the assumption that the macular region of each eye is widely represented in the visual cortex of both hemispheres. That the cortical centres for macular vision are distinct from the hemiopic is shown by the fact that macular vision is retained when both hemiopic centres are destroyed. In this case double homolateral hemianopia is produced, leaving limited central vision, which, unless especially tested for, may escape both patient and physician. The term "cortical blindness" has been incorrectly applied to this condition. In hemianopia there may be considerable concentric narrowing of the retained visual fields, especially on the side opposite the lesion.

Functional hemianopsia.—This may occur in megrim, as part of the epileptic aura, and in connection with the epileptiform attacks of general paralysis of the insane. In megrim the hemianopia, like the other visual phenomena (teichopsiæ), ushers in the attack. It is due to a symmetrical patchy blindness: the sufferer, *e.g.*, may be able to see the whole of a person's body save only the head; or perhaps only one half of the head may be visible. The blindness in this case appears to be due to a contraction of retinal arteries, a phenomenon which has been actually observed during an initial phase of the attack.

Hysterical hemianopia has been described; the existence of such a form is doubtful. Hemianopia is said to occur occasionally in uræmia.

C. LESIONS OF THE ANGULAR GYRUS.

This gyrus is closely associated with vision. The macular region in both retinæ is said to be represented in each angular gyrus. Bilateral destruction of it causes total blindness. Unilateral destruction leaves vision intact. (Sharkey has, however, recorded a case of crossed amblyopia from lesion of one angular gyrus.) Lesion of the left angular gyrus causes word-blindness (inability to recognise written or printed words although they are seen), and occasionally psychic blindness (inability to recognise objects of any kind, although the patient sees them); or, again, there may be loss of the sense of orientation—the loss of visual memory, *e.g.*, may prevent the patient from recognising a familiar locality. [According to Marie pure word-blindness only occurs in sub-cortical lesions. Word-blindness is not, he contends, due to involvement of the angular gyrus (supplied by the middle cerebral), but to a lesion situated in the territory of the posterior cerebral.] Lesions of the right gyrus cannot be diagnosed.

Irritative lesions of the angular gyrus may excite a visual aura, consisting either of crude visual sensations, such as sparks, or visual images (hallucinations). A visual aura may occur both in idiopathic epilepsy and in Jacksonian epilepsy. Visual hallucinations may occur in insanity and delirium, such as that produced by fever or drugs (*e.g.*, cannabis indica, alcohol).

The motor effects produced by irritation of the angular gyrus are considered later.

(*To be Continued.*)

IN opening the new sewage works the other day, built by the Brentwood and Billericay joint authorities at a cost of £20,000, Dr. Thresh, Medical Officer of Essex, said that they were unlikely to be superseded for many generations, as the bacteriological process had been so improved that in these, the most modern works in the kingdom, the sewage effluent could be made pure enough to use over again as drinking water.

"VITALISM" IN THE PRACTICE OF MEDICINE (*a*)

By JOSEPH O'CARROLL, M.D., F.R.C.P.I.,

Physician to the House of Industry Hospitals, Dublin; President of the Section of Medicine in the Royal Academy of Medicine in Ireland.

HAVING briefly sketched the work of the Section during its thirty years of life, Dr. O'Carroll proceeded:—All of us physicians may be said to undergo an evolution in three stages. At first we look at Nature—morbid Nature as it seems to us—with wonder, tempered with curiosity; then with easy confidence we set ourselves to combat the morbid impulses of Nature, with what poor success in any one generation we know too well; and finally we learn that the supposed morbidities of Nature are either the necessary wearing out of a finite machine or the result of the inter-action of forces, often vital ones, in which the human organism for a time or for good gets the worst of it.

Professor Schäfer, in his recent address to the British Association for the Advancement of Science, seemed to take the view that the phenomena of life may ultimately be capable of being stated in a series of chemical equations; in other words, that the activities of the simple cell, and, therefore, of the most compound organism, are an expression of the reaction of its chemical constituents to those of the medium in which it lives, or of the antagonist with which it strives for life. "We may fairly conclude," he says, "that all changes in living substance are brought about by ordinary chemical and physical forces. . . . At the best, 'vitalism' explains nothing, and the term 'vital force' is an expression of ignorance which can bring us no further along the path of 'knowledge.'"

He supposes a gradual transition "from material which was lifeless, through material on the borderland between inanimate and animate, to material which has all the characteristics to which we attach the term 'life.'"

Now, I do not think that this wholly mechanical view of life will commend itself to the student of internal medicine. Every man must work on some hypothesis or other, and this purely mechanical explanation of life is, it seems to me, entirely unhelpful to the physician. Far be it from me to say that the chemico-mechanical view is utterly wrong. I recognise that it goes a very long way in explaining most of the processes which we are accustomed to call vital. The law of gravity is as compulsory in a living man as in a corpse; filtration, osmosis, liquid tensions, all obey their several laws in the living body as in the laboratory; and chemical reactions, no doubt, are equally obligatory. But the living body, I believe, possesses a power outside of all these physical forces—namely, the function of resistance, adaptation, or accommodation; that function of life is the very corner stone of evolution, and is a new force outside and beyond those which enter into physico-chemical reactions.

The detritus of some Alpine height will as certainly as possible pursue a continuous descent towards the sea, and no fragment of it will ever have the power to lift itself backwards by the millionth part of an inch towards the boulder from which it originally broke away. Its destiny is simple and immutable unless in so far as some living thing may modify it.

But look at the world of life on the other hand. Roughly speaking, one may say that survival depends upon resistance to gravity, resistance to friction, resistance to heat and cold, and to a thousand other destructive forces. Resistance is the mark of life; partial resistance, coupled with partial acquiescence, in biology as in politics, may be termed accommodation, and to this power of accommodation or compromise is largely due the survival of many forms of life.

Man has learned to accommodate himself to physical surroundings and to biological infections which in earlier ages were much more fatal than they are now. The stress of modern life would have been intolerable—physically intolerable—in the ages in which a man had done a good day's work when he had killed enough game for two or three days' food, and had gorged himself into a condition of somnolent repletion. Under the press of competition he has learned to eat more temperately and to work harder. Yet now and again an individual here and there breaks down under the strain; his power of accommodation gives way, and he is said to become neurasthenic. He becomes intolerant of the noise, the bustle, the anxieties, the ambitions of civilisation; and then we put him to bed, we give him plenty of food, and as far as possible we shut him off from contact with the outside world. We try to reproduce the condition of the over-fed savage in his rock-cave, in the hope that after a time he will come forth fit to hunt with his fellow-man again. The breakdown of the neurasthenic only accentuates the accommodation of the majority of men to more strenuous conditions.

Man has always had to fight for existence with other forms of life. The microbic organisms have at all times been his deadliest enemies. Yet we have abundant evidence that now he makes a much better fight than in former ages. The infective fevers are less deadly in a community in which they are endemic than in one to which they are freshly introduced. In the one case the continuous entity Man—what I may term the brotoplasm—has accommodated itself to the microbic enemy, and in large measure survives; in the other case it has not yet acquired the faculty of accommodation, and for a time it largely succumbs. Tuberculosis has become less deadly, syphilis has become attenuated in virulence, leprosy tends gradually to become more and more limited in its distribution. If this increased resistance depends, as no doubt it does, on chemical changes in our constitution, it is no less true that only in a living organism could such change have come about.

Yet it would be a fatal confidence to ignore the fact that if man has the power of resistance and accommodation, the microbic organisms have similar powers. Little as we know about them, this at least is certain, that though the human body may be able completely to antagonise some of them, as witness the finite fevers, such as measles and smallpox, yet there are others which it can often only keep in check without absolutely killing or eliminating them. The persistence of the bacillus in the typhoid-carrier, the recrudescence in apparently cured tuberculosis, the cropping up of syphilitic manifestations when cure had long seemed complete, are suggestive of the view that the microbe-race fights for survival with a tenacity and a success which are utterly inexplicable as due to mere chemical force as we understand the term. That micro-organisms can acquire immunity to the human anti-bodies is common knowledge. Experience of the salvarsan treatment appears to show that the *spirochæta pallida* may acquire a certain power of resistance to arsenic. A succession of small doses resting unsuccessful, a full dose may fail equally; probably because the organism has become habituated to the poison, as if it were one of the arsenic eaters of Styria. This may be the reason why in pernicious anæmia arsenic administered by the mouth may have a temporary success while it ultimately fails. I am myself disposed when I next meet a case of that disease which has not been treated by arsenic, to try an injection of salvarsan in the hope that the causative agent may be annihilated by a dose which will not be intolerable for the host.

The accommodative process is active not merely between organism and organism, but within the individual living thing is visible in direct proportion to the complexity of its organisation. The form, structure, and function of the various parts of a compound organism, each dependent for safety not merely on its own activities but on those of other parts, are an expression of that accommodative process which I take to be such an essential mark of life. The original cells of the fertilised ovum have surrendered their individual liberty and made an accommodation or pact by which division of labour and differentiation of form

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(*a*) A Presidential Address to the Section of Medicine in the Royal Academy of Medicine in Ireland, at the Inaugural Meeting of the Session of 1912-1913.

secure the healthy development of the whole community into what we call an individual. Those which are marked off to be nerve cells—comparatively few—are the life-peers of the human organism. Their dignity and function are coterminous with their life: but they have no heirs. On the other hand, the lower class cells—that is, the least differentiated — breed freely, have a continuous succession, and may from time to time leap the barriers of form and function allotted to them, forming reparative structures such as a scar, or definite new growths such as cancer. Even in this last eventuality the more orderly cells can be seen to constitute themselves into an army of resistance, which makes a continuous but perpetually losing fight against the rebel cells constituting the new growth.

In the progress of common diseases this vital accommodation is marked; and I venture to assert that no one can form a true estimate of disease who does not at least try to separate the processes which are truly morbid from those which are resistive, conservative, and accommodative. Take, for instance, the common arterio-sclerotic syndrome. A heightened blood-pressure and perhaps an unduly perceptible artery-wall hint at the establishment of the disease, whatever its cause. Then a heart-beat more forcible than normal, and perhaps increase in the daily quantity of urine, and the presence in it of a trace of albumin, complete the clinical picture. I hold that he who would understand and treat the disease—if, indeed, we are ever likely to understand it fully—must recognise that for a time at least the events in it are protective for the general organism, and that the end approaches in proportion as each protective process breaks down. Thus in this syndrome the cardiac hypertrophy and the polyuria are probably protective. The tumult of the heart and the albumin incontinence of the kidney probably indicate the failure of these two lines of defence. No doubt the arterial change which first attracts attention is itself also protective, and by no means morbid. At least we may say that the arterial pressure commonly falls away towards the end, accompanied by a corresponding deterioration in the condition of the patient. The *materies morbi* is evidently behind all these symptoms.

This view of disease might seem to deprecate all treatment. By no means. It suggests only that we should try to set symptoms in their processional order; that we should aim at discovering and treating the primary cause if possible; and that we should congratulate ourselves on the diminution or disappearance of the secondary symptoms only if the general condition of the body as a whole is therewith manifestly improved. In other words, I wish to inculcate the greatest respect for symptoms which in their early stages I believe to be defensive, and which, as they represent the effort of this or that tissue or organ to defend the whole organism even at the cost of ultimate damage to themselves, I conceive to be essentially vital and not chemico-physical phenomena. Taking this very case of arterio-sclerosis, let me suggest by way of illustration what I take to be an error in treatment. A person showing this condition develops after some time a little puffiness about the ankles. My reading of the cause of this is that probably the kidneys are becoming a little unfit to maintain their line of defence; but the patient thinks he has dropsy, and claims instant removal of a condition which he takes to be a sure forerunner and cause of death. We yield to his prayer, and administer a brisk diuretic. The œdema disappears like magic, and for a few days we enjoy the credit of having performed a miracle. But a swift retribution follows in the shape of more dropsy, less urine, and the more or less rapid supervention of uræmia. Respect for the vital and accommodative resistance of the human body should have taught us to hesitate before interfering with a little harmless œdema by direct stimulation of the organ of whose fatigue or failure it was the sign.

This is not to say that in any given case we are to stand by admiring the process of nature and doing nothing. This matter of œdema and dropsy will serve to exemplify my position. We may take it for granted that there is a continual circulation of the fluids of the body from the heart to the tissues (including those of the heart itself) and from the tissues back to the heart. The loss of fluid from the skin and the lungs will normally be balanced by the intake from the alimentary tract, and may, for the purpose of my argument, be ignored. When the circulatory mechanism for any reason fails, there must be a tendency to stasis in the circuit, and stasis would mean death to the organism. Stasis is put off by the occurrence of dropsy. Where does it first show itself? In the fine lymphatic passages surrounding the ultimate and least differentiated tissue cells and in the larger lymphatic cavities. We have latterly thrown over the old mechanical view of dropsy; thanks largely to the labours of the French school, we now incline to the chemical explanation; but I venture to assert that while both mechanical and chemical explanations are still necessary, they are insufficient to account for the special localisation of dropsical fluids. That localisation is dependent upon a vital selection by which it is placed where it can do least harm; and I may add that it always, or nearly always, occurs when the kidneys have already done their best to relieve the relative plethora of the circulation, and have begun to fail. Dropsy so localised is for a time harmless. Any attempt to remove it by stimulating the kidneys to further effort is sure to fail; when it becomes obnoxious by its bulk it is best removed by paracentesis. This view gives to dropsy an essential value as a vital effort on the part of the organism to relieve the main circulating system; the blood is permitted to unload the least essential of its elements in the interstices of the least essential tissues, which in their turn live much longer than if they resisted such a burden. This is no fanciful view. Over and over again in hospital we have seen dropsical patients kept alive for terms which seemed impossible at their admission, by leaving their dropsy untreated till it reached a pressure which just incommoded the circulation or the breathing, and then removing it by tapping. More than five years ago a woman was admitted into hospital under my care, apparently dying with mitral incompetence, dropsy, and albumin in the urine. She died only a month ago, having had abdominal paracentesis performed more than a hundred times. During four years she had been able to go home for a few days between each tapping, when the weather was fine, while she stayed with us entirely during each winter.

I contend, then, that while the living organism is subject to all physical forces, it has a force of its own —a vital force which determines it to preserve its own individuality. That force, present in all its several structures, determines each to preserve its own existence, while at the same time it is dependent for perfect function upon the health of the other structures which go to make up the organism. In health the distribution of function is so equilibrated that we can recognise no part as being more perfect or less perfect than another. In that falling away from health which we call "disease" it commonly happens that structures and tissues fail in proportion as they are more highly specialised or have been later in development. But at each stage of degradation defensive works are set up by tissues lower or simpler in structure and of older birth, so that the most ancient of our tissues are the last to die. A good deal of the essence of a scientific treatment of disease consists in the full use of these lower defences before we attempt to recapture and rehabilitate the higher positions which have been lost or put out of action.

All this implies something akin to intelligence or purpose in the living cell or in the community of cells which constitute the individual, by which it aims perpetually at not ceasing to be, and by resistance and compromise adapts itself to forces from within or from without which tend to its destruction. And as the various groups of cells of different function which constitute a higher organism live a social life, in which each is dependent upon and acts in defence of the others, I recognise herein the very beginning of a social morality. That morality is based upon mutual interest and the common good. When organisms of similar kind multiply they retain as individuals, and as a community commonly develop on a higher level this social morality. In the case of lower organisms than ourselves we usually call the various manifestations of this social morality by the name of instincts —a name which explains neither their origin nor their purpose. If we recognise the defensive and accommodative purpose of these instincts we give them a moral sanction, and we accept morality as one of the functions of life. Thus the vital force which, in my conception, with all the various so-called physical forces, conditions the existence of a living organism or community brings to such organism or community a power of resisting dissolution by mere physical forces; and in higher organisations this resistance is made efficient by a sub-division of function and a mutual interaction of parts which, in a human community, would be said to be the result of a natural morality. I see no reason for denying to simpler organisations a simpler and more embryonic, though none the less real and beneficial, morality.

But I do not think that anyone can imagine a moral sense, no matter how rudimentary, being instilled into a mass of "colloidal slime" by any grouping of chemical and other physical forces. If this is unthinkable, then Professor Schäfer's vision of life being some day produced anew by the chemist from inorganic matter must remain a dream of the impossible.

This very crude intrusion of mine into a more or less abstract domain will, I hope, be acceptable to you for the sake of its lesson. That lesson is that we should, in our dealings with sick humanity, try to discriminate between those symptoms and conditions which are harmful to life and those which are defensive of it; that we should approach Nature as we see her, with respectful timidity, not with boorish temerity; and that we should think of ourselves as servants in the court of a great and wise and beneficent, but unfortunately dumb, queen whose will has to be read by signs, according to our individual ability.

To accept the chemico-physical theory as the full explanation of life would be to hand ourselves over to a perfectly hopeless determinism. While it may possibly be true that Professor Schäfer's "colloidal slime" may from time to time take on the form and functions of life—in other words, that the production of life is continuous—such a jump into life must mean the taking on of qualities which were in no degree inherent in the original material. To say that such qualities—defensive, social, and moral—are explicable on chemical grounds accounts for such change no more than "vitalism" does, and it leaves us with the uncomfortable feeling that while it deprives the term "chemical" of all definite value, it robs our conception of life of all that it connotes in the long story which begins at or before the amœba and ends with human civilisation.

A PATHOLOGICAL DIGEST (a)

By H. MACNAUGHTON-JONES, M.D., M.A.O., M.Ch., F.R.C.S.I., F.R.C.S.E.

Mr. President and Fellows:—I cannot express in words my appreciation of the unexpected and exceptional honour that the College of Surgeons conferred on me when the President and Council invited me to address its Fellows. That appreciation was naturally accompanied by a sense of my inadequateness, but acquiescence was to an extent justified by the subject matter of the theme on which the Council proposed that I should speak.

This was to give a brief description of some of the most interesting and important pathological specimens which the Council honoured me by accepting, and still further by placing in a separate collection in its historic Museum. That collection is not altogether gynæcological, and in the large album that accompanies it there are several miscellaneous original drawings representing matters more especially of ophthalmological and otological, as well as a few of general surgical interest. Of a large number of the specimens there are microscopical sections, showing their histological features. These I shall add to the collection after classification and arrangement according to their bearing on the macroscopical characters of the morbid growths or pathological changes. Clinical histories will accompany the great majority of the specimens. This I regard as most essential for teaching ends. It must be remembered that the gynæcological specimens which from time to time I considered worth preserving were entirely obtained from private operative work.

I propose to ask your attention to some examples of morbid conditions illustrated by these specimens, though I can only select a very limited number of each. I shall consider them under the heads of uterine, ovarian, tubal, and vaginal. I shall then demonstrate some of the more interesting microscopical sections which are included in the collection.

Necessarily, several have already been referred to in medical literature.

Uterine Myomata—Degenerations.—My largest solid myoma is represented in the album, as it really was too large to preserve. The photograph shows its actual size. It weighed twenty-eight and a-half pounds, and measured fourteen inches in length by thirteen and three-quarters at its widest part. It was covered by a dense capsule. The patient was a multipara, æt. fifty. Its origin was peculiar, growing mainly from the left broad ligament; but it had also a root in the adjacent cornu of the uterus. In its removal the bladder, which was adherent to the tumour, was opened. The wound in it was closed, and the patient made an excellent and permanent recovery.

This myoma which I show you was my next largest, as you will readily understand from its length. It reached from the pelvic floor to the diaphragm, and by pressure on the heart and lungs, caused dyspnœa and tachycardia. It had somewhat of an hour-glass shape. There were some pelvic and bowel adhesions. The patient never rallied from the operation, and appeared to die simply of shock on the third day. On careful examination of the tumour, a portion of a divided ureter was found attached to it. There were no urinary symptoms, and she secreted urine in fair quantity. This has been my only case of injury to the ureter. Probably I was not as careful as I should have been in its isolation.

This tumour is a good example of mucoid and *calcareous degeneration* with necrobiosis in a myoma. The patient was æt. 48. The tumour was increasing rapidly in size, but there were no very urgent symptoms at the time of operation. As you see, it is a dual myoma, and in the upper and larger growth there is a considerable cavity which is lined by a zone of calcareous material about one-eighth of an inch in thickness. The cavity was full of mucoid fluid. Bearing on this form of degeneration, I shall presently show on the screen a section from this small myoma, in which is a circumferential area of hyaline degeneration. This, the incipient stage of calcification, is well seen.

This large myomatous tumour illustrates *telangiectatic degeneration.* It was discovered accidentally by a nurse, whose sister complained to her that she had for some time felt a swelling in the abdomen. There had been no special symptom, and the young lady, æt. 39, who was a professional musician, had been following her occupation up to the time of operation. The large cavity contained ten ounces of inodorous, brown fluid —with the *débris* of broken-down necrobiotic tissue. Its walls were soft and covered with soft lymphoid material. A dense fibrous capsule covered the tumour, the core of which was extremely dense and hard.

It was quite superficial, pressing on the abdominal wall, and you can see that only a very thin partition of muscle separated the cavity from the peritoneum. The patient was also a great Alpine climber, and has taken many photographs of glaciers since the tumour was removed.

Multiple Myomata in Mother and Daughter.—I have here an example of a curious coincidence in the matter of myomata. I removed this tumour, the drawing of which, with a description, is in the album. The patient, a multipara, æt. 54, was profoundly anæmic from repeated and profuse hæmorrhages. The risk of operation was great, but with rest and restorative treatment, she underwent supra-vaginal hysterectomy successfully, and this multiple myoma, weighing five and a-half pounds, and with a large mucoid cavity in its centre, was removed. There were over a hundred nodules of various sizes scattered through its substance. The patient made a permanent recovery. In 1907 I was consulted by her daughter, æt. 33, for menorrhagia, and this multiple myomatous tumour, containing, as you see, a mass of nodules, was removed. She also made an excellent convalescence.

(a) An Address delivered before the Royal College of Surgeons of Ireland, Nov. 21st, 1912.

Carcinomatous Invasion of Myoma.—Here is a specimen removed by vaginal hysterectomy from a spinster æt. 58. The tumour was the size of a fœtal skull at term. The large intramural fundal fibroid was separated in its capsule from the lower uterine segment, which is also myomatous, and invaded by a soft columnar-celled carcinoma, with solid epithelial branches stretching into it. Below this, in the cervix, is a small benign myoma, and careful examination failed to detect any evidence of malignancy as far as the internal os, though there was inflammatory intramuscular infiltration. The tumour, with the adjacent portion of the vagina, was removed by the vaginal route. She recovered from the operation well, but died some twelve months after from obstruction of the bowel. Though the cause was not ascertained, it was probably of a malignant nature.

Myoma Simulating Pregnancy.—This tumour illustrates the need for caution in diagnosis. A healthy young woman, æt. 38, consulted her doctor for some slight chest symptoms, and in the examination, the tumour I show was discovered. It reached above the umbilicus, and to the feel, as well as in the appearance of the abdomen, simulated pregnancy. As the breasts were rather large and full, with prominent and dark nipples, and there had been some irregularity of the catamenia, the suspicion of pregnancy was increased, but, fortunately, no question of chastity was raised.

When I saw her, I found the cervix normal, and I was able to dissociate the growth from the uterus. At operation it was found to spring by a pedicle about three inches in width from the left cornu of the uterus. The uterus and adnexa were quite healthy. It was easily removed.

Diffuse Adenoma of the Uterus.—There are two examples of diffuse adenomatous degeneration of the uterus in the collection. One is interesting, as with the uterus are the two ovarian cysts removed by me in previous cœliotomies, with one broad ligament cyst. Subsequent severe hæmorrhage, despite curettage, necessitated hysterectomy, when another broad ligament cyst was discovered. The uterus was entirely adenomatous. Two years after I performed appendicectomy for appendical complications. However, the result of the four cœliotomies was a permanent cure. In the other case there was cystic degeneration of both ovaries, persistent hæmorrhage causing profound anæmia, notwithstanding curetting, was the prominent symptom. The operative result was equally satisfactory.

Carcinoma of the Uterus with Fibroma of the Ovary.—This is an interesting specimen showing extensive carcinoma of the cervix uteri, and a large fibromatous tumour the size of a cocoanut of one ovary. The patient, æt. 56, had passed over the first two years from the cessation of the menopause without any trouble. Then hæmorrhage commenced; this she attributed to the occurrence of the catamenia. It continued at intervals for two years, and she sought no advice. The hæmorrhage then became alarming, and she came to me. The condition disclosed was then discovered. At the operation the ovarian tumour was found isolated. She is in good general health seventeen months after operation, but there is a recurrence in the vaginal vault. The broad ligaments and the adnexa, with the exception of the large ovarian fibroma, are seen to be absolutely free of disease.

Cancerous degeneration limited to the summit of the fundal cavity, in a uterus affected with endometritis, is shown in this specimen. The entire adnexa at both sides with the broad ligaments can be seen to be perfectly normal. By its side is an interesting example of malignant degeneration occurring in a myoma, and limited to the summit of the tumour.

Pseudo-hermaphroditism and Myoma.—This fœtus illustrating Kleb's pseudo-hermaphroditism has a bearing on myoma uteri and the question of maternal impressions. It was taken at the eighth month from a patient, who was healthy up to the time of her marriage, suffering from mental symptoms and apprehensive delusions. While travelling abroad, she had a shock from the sight of a rather hideous deformed beggar. She became obsessed with the idea that her child would be deformed. It was determined to induce labour at the eighth month. Owing to the growth in the lower segment, it was impossible to deliver by Bossi's dilator or otherwise, so I placed temporary clamps on the vessels, and removed the uterus. I then rapidly extracted from it this monster, which was alive. There is a rudimentary penis with internal female genitalia. Abnormalities are also to be found in the cranium and maxillary bones. The patient's mental symptoms disappeared, and she did well.

Here is a myoma which teaches a clinical lesson. It was removed from a patient who *consulted me for an affection of the hip-joint.* There had been great pain in the joint for some time, with inability to walk. I discovered the myoma, and at operation this tumour of the ovary was found pressed down on the sciatic by the uterus. The symptoms disappeared on its removal. The Pathological Committee of the Obstetrical Society reported it as a fibro-adenoma of the ovary.

Procidentia.—These two specimens represent extreme cases of procidentia. One is from a patient æt. 74 at the time of operation. The sac which contained the uterus, with the cystocele and rectocele, had been completely protruded from the vulva for over 25 years, all three organs being adherent. In the other, with somewhat similar conditions, the sac was down for over 15 years. In both hysterectomy, with removal of a considerable portion of the vagina, was performed. The bladder and bowel were returned into the pelvis, and the vaginal vault was well secured. In both cases the relief was absolute and permanent. The older patient lived in perfect comfort to the age of eighty-six. The extensive nature of the adhesions to bladder and bowel can be readily seen.

The Adnexa. Giant Scirrhus of the Ovary.—In regard to pathological changes and growths of the adnexa, there is a fairly complete collection. I shall just refer to a few. This scirrhus carcinoma is almost a record specimen. It measures twelve inches in length by twenty-seven in circumference. It was taken from a widow in whom conception might have occurred before her husband's death, and for some time she believed she was pregnant. It grew rapidly, causing no pain, but emaciation, sickness and diarrhœa. After its removal she weighed under six stone. Her other ovary, removed at the same time, is a fair-sized adeno-fibroma. The Fallopian tubes, uterus and meso-salpinx were healthy.

She made a capital recovery, but some five months after operation she died of cancer of the omentum and bowel. She was sent to me by my very old friend, and well-remembered President of this College, the late Edward Dillon Mapother.

Ovarian Sarcoma.—This is a large cysto-sarcoma of the ovary. All the other pelvic viscera were healthy. So far as I know, the recovery was permanent. Here again comes in the difficulty of diagnosis in some of these cases of ovarian solid and semi-solid tumours of the ovary. The growth was thought to be a myoma uteri.

Ovarian Papilloma with Carcinoma of the Uterus.—There is a rare example of carcinoma of the cervix uteri with large papillomatous growths of both ovaries. I was indebted to Dr. Gelston Atkins for the specimen—the original drawing in the atlas. The patient died subsequently to operation from cardiac complications.

Tubo-ovarian Cysts and Abscess.—These examples of ovarian and tubo-ovarian cysts I purposely group together. The first is a large bilocular hæmorrhagic cyst, which I removed entire when it was on the point of rupture, with the opposite diseased adnexa. The Fallopian tube can be seen incorporated with the wall of the cyst, but not communicating with the cavity, whereas in this large cyst, which I was given by the late Professor John Taylor, the fimbriæ of the Fallopian tube were found on the inside of the cyst wall; the opening can be seen on inspection. Here also is a true tubo-ovarian abscess, and the Fallopian tube is seen opening into the ovarian suppurated sac.

Pyo-salpinx.—There is a specimen of double pyosalpinx, and the difficulty of operation in this case will be readily recognised from even a slight inspection. The two large pus sacs and the uterus are seen covered by the remains of adhesions. Tubes, ovaries and uterus were matted together in one dense infiltration that filled the pelvis from the level of the crest of one ilium to the other. The bladder was enormously distended, and on the first occasion when I saw the patient I drew off five pints of urine. The summit of the bladder reached to the umbilicus. As many as eight pints of urine were secreted in the twenty-four hours.

My diagnosis was a mistaken one, as I thought I was dealing with a uterine fibroma. Salpingo-oophorectomy with supra-vaginal hysterectomy was performed, and though I had to reopen the abdomen twice after operation, the patient made an excellent and permanent recovery.

Peritoneal Cyst.—There is an unusual condition illustrated by this specimen in which an orange-coloured peritoneal cyst was situated between the sac of a hydro-salpinx and a blood cyst of the ovary. The colour of the peritoneal cyst was bright-orange on its removal, due to absorption from its proximity to the blood cyst.

The Appendix and Adnexa.—This specimen is a good example illustrating the difficulty often found in diagnosis and in differentiating between appendical inflammation, and the tract the infection or inflammation travels by, from the appendix to the adnexa, or from the latter to the appendix. We are greatly indebted to the admirable work done by Dr. Douglas Reid, of Cambridge University, in elucidating the anatomical relations of the appendix to the adnexa. "Studies of the Intestine and Peritoneum in the Human Fœtus," *Journal of Anatomy and Physiology*, 1911-12.

In this specimen we see the appendix, tube, and ovary matted together, while one large concretion, the size of a small bean, blocks the severed appendix, and a second, of the same size, which escaped at operation, is suspended in the fluid. There was no suspicion of an appendical affection until the abdomen was opened.

Ovarian Cystic Degeneration in the Fœtus.—I shall show presently on the screen sections of cystic ovaries given to me when in Heidelberg by Professor Schottlaender. They were taken from a stillborn fœtus. They prove what the late George Carpenter so well showed, that occasionally the foundation of ovarian cystic disease may be laid in fœtal life.

Various Types of Ovarian Degeneration.—There are a number of specimens in the collection illustrative of the various types of cystic, sclerotic, and cirrhotic ovaries; also others showing lutein and hæmorrhagic cysts. I propose later to show with the epidiascope, both macroscopic and miscroscopic sections of these. They illustrate the ovarian source of dysmenorrhœa. Robert Barnes's term "dysootocia" was a good one. The suffering has often no relation to the size or character of the ovary as it is felt on digital examination. There are also examples of fibroma, fibro-adenoma, and adeno-fibroma.

Dermoids and Malignancy.—The tendency of dermoids to assume a malignant type was shown in the instance of this dermoid cyst. There was no sign of malignancy when it was removed, but the patient died within the year of malignant disease of the omentum.

Pseudo-Adenoma of the Ovary and Malignancy.—In connection with a pseudo-adenomatous ovarian tumour that is in the collection, there is an interesting point connected with the further degeneration of these tumours, and their tendency to become malignant, or the danger of metastasis; also the bearing of the presence of ascites on malignancy. In this case, thirty pints of ascitic fluid were drawn oft. There has been no recurrence.

There was a curious histological feature found on examination of the cyst. The hairs of the cyst wall were being devoured by the multinuclear cells.

Record Ovarian Cyst.—My record ovarian tumour I removed in 1910. The abdominal girth was fifty-eight and a half inches. It was a unilocular cyst of old standing in a woman of 67. There was some ascitic fluid. She made an excellent recovery.

Primary Tuberculosis of the Fallopian Tubes.—I wish to draw your attention to these specimens of primary tuberculosis of the Fallopian tube. The first I show is remarkable as the tuberculous sac was removed from a patient æt. 22, who after its removal had four pregnancies, one a twin birth. After her last labour, nine years subsequent to her operation, I had to remove the other adnexa for cystic disease, and the most careful examination failed to discover any tubercle. The microscopical appearances in this specimen and the other three were published in the "Transactions of the Royal Society of Medicine." So far as I know, all four women are in good health at present.

Ectopic Gestation.—I shall only ask your attention to four instances of ectopic gestation included in the collection. One is a very early ovum of about the eighth day, the earliest I have seen. There is a rupture visible in the sac, and the pelvis was full of blood when I operated. The patient did well. The second shows a large suppurative cavity in the wall of the sac which contains the fœtus. It had lain for a long time in Douglas's pouch, having been mistaken for an enlarged retroverted uterus. The contents of the outer sac were putrid; some escaped and infected the parietal wound. The patient died of the wound infection, for the pelvic and abdominal cavities were found to be quite healthy when the abdomen was re-opened. This taught me a lesson, for not long after I had a case of ruptured pericæcal abscess with a sloughed appendix. After cauterising and protecting the stump of the latter, and thoroughly cleaning the peritoneal cavity with swabs wrung out of weak formalin, and shutting off the bowel, I resected the edges of the abdominal wound through its entire length, brought the vivified layers together, put in a supra-pubic drain, and the patient is a healthy woman to-day. I should not in all probability have lost the first had the edges of my wound been properly covered and protected at operation. Time teaches us much. The only other ectopic case I have lost you see in this specimen. The abdomen was full of blood; there was a large rent in the broad ligament; blood was issuing from this and from the placenta, which, with the sac, was in the abdomen adherent to the bowel. The fœtus had escaped into the abdominal cavity and was found under the spleen. The bleeding was completely arrested, but the patient died from the shock and hæmorrhage.

There is a specimen of peri-tubal hæmatocele, showing what is rather an unusual feature, viz., the incorporation of the ovary with the gestation sac spread out on its posterior surface. This was only discovered by Dr. Lockyer on making a section of the wall. This cyst of the meso-salpinx exhibits the difficulty in diagnosis in some cases of ectopic gestation. The usual symptoms indicative of gestation were present. It proved to be a parovarian cyst which had ruptured.

Primary Carcinoma of the Fallopian Tube.—There is one specimen of primary carcinoma of the Fallopian tube which, as you are aware, is very rarely met with. It was reported on by Dr. Lockyer, and is fully described in my manual of "Diseases of Women," in which a full macroscopical and microscopical report appears. It was unilateral. Unfortunately, the tumour was laid aside, and was not discovered for some time, so I could not trace the clinical particulars of the case.

Omega Tube.—Here is seen a curious consequence of chronic salpingo-oophoritis. The right tube is doubled on itself into an omega-shaped mass, with a cystic ovary attached, and the meso-salpinx is absent. The adnexa of the left side were pathologically affected in a similar manner. Both adnexa were buried in a parametric infiltration, and the operation was a difficult one. But the patient made an excellent recovery.

Syphilitic Salpingitis.—I should like to ask your inspection of these tubes. I have never seen anything quite like them. The dense, round-celled infiltration invading all the walls of the tubes, filling their lumen, and the greatly hypertrophied vessels, give their sections a sort of foliaceous appearance. The tubes were taken from a young patient who was perfectly healthy before she contracted syphilis. During the desquamative stage, she first complained of adnexal pain. The same year I saw her, and removed the tubes.

Accessory Hydro-salpinx.—There are several specimens here, one of which was specially reported on for me by Mr. Sampson Handley, illustrative of the condition so well described by him of accessory Fallopian tubes, or accessory hydro-salpinx. These cysts are above the broad ligament, some open into the tubes. One specimen, he says, is of importance, as proving that certain cysts of the broad ligament are of Mullerian origin. The cysts histologically partake of the characters of the Fallopian tube.

Vaginal Cysts.—Much has been written on the ætiology of vaginal cysts, and the work of Santi abroad and Roger Williams at home is well known. There is an interesting example in the collection of a vaginal cyst which I removed in 1905 from a patient æt. 35 years. A few months previous to its removal during an operation for curettage, I discovered in the vaginal vault a cystic tumour the size of a pigeon's egg. Dr. Lockyer, who examined both specimens, reported that its epithelial lining was of the spherical type. This cyst, which I removed later, must then have been concealed from view by the vaginal speculum during the operation. I dissected it out in its entirety from its surrounding of fibro-muscular tissue, and its waxy lining contained cubical epithelium. It is for pathologists to say what was the origin of the upper cyst and whether the lower one was of a Gärtnerian or Wolffian nature.

Primary Carcinoma of the Kidney and Angioma of the Liver.—There are two interesting specimens, not gynæcological, one of primary carcinoma of the kidney, and another of angioma of the liver. The first patient lived for two years after I removed the kidney. There was recurrence in the cicatricial tissue of the wound. The second died from the shock of the operation.

Ganglion Neuroma of the Mesentery.—My last contribution to the Museum includes this specimen of ganglion neuroma (partly embryonic) of the mesentery. Complete drawings of the microscopical features of the tumour, and the various sections prepared by Dr. Turnbull, of the Pathological Institute of the London Hospital, accompany it. His pathological report of this unique specimen is one of the most exhaustive I have ever received.

I shall not delay to refer to any other specimens, but proceed to refer to some of the microscopical specimens which form part of the collection. [The microscopical demonstration included sections illustrating the pathology of the various specimens which had been referred to. In addition to these were several others, including metastasis from the mammary gland to the spinal cord, with carcinomatous tumour of the latter; fibroma of the mammary gland degenerating into sarcoma; primary tuberculosis of the mammary gland; various pathological changes in the Fallopian tube; carcinoma of all the internal genitalia with the exception of one Fallopian tube—the muscular tunic only of the bladder being involved; cancerous degeneration of a uterine polypus; hydatidiform mole; various pathological conditions of the ovaries and malignant disease of the vagina and vulva.]

OPERATING THEATRES.

BOLINGBROKE HOSPITAL

Prepatellar Bursa.—Mr. Swainson operated on a man, æt. 30, who had for a year been the subject of a prepatellar bursa; this was probably caused by his occupation, in which he was accustomed to kneel a good deal, bearing his weight on the right knee. The diagnosis was obvious: a large, tense, fluctuating swelling being situated in front of the patella. There were no signs of inflammation, and it was decided to remove the bursa.

A semilunar incision, convex outwards, was made on the outer side of the swelling, and the skin raised by careful dissection from the bursa. A few vessels were ligatured, then the bursa was dissected off the patella. The skin flap was replaced and the wound sewn up. The knee was firmly bandaged with a roll of gauze so as to apply pressure; wool and a bandage were applied over all.

Mr. Swainson said this was a very simple case, but none the less interesting. He would call attention to the fact that the condition was much more common in women than in men. As to the operation, it would be noticed that the incision was made on the outer side and not in front of the knee-joint, so that the subsequent scar would not be exposed to pressure. Care was taken not to buttonhole the skin, and not to wound the knee-joint. There was little more to say as to the case itself, but he would now refer to some of the diseases of bursæ in general and to adventitious bursæ. As to diseases, acute, simple bursitis might arise from injury, and could be treated by rest, application of heat, and if necessary, by aspiration. Simple bursitis might pass on to an infective bursitis, which might also be caused by wounds. Incision and drainage would here be necessary. The condition which he had operated on, usually known as housemaid's knee, might be regarded as a chronic simple bursitis due to a chronic injury. Similar bursæ to the prepatellar bursa sometimes occur in other situations, as over the acromion process in Chinese coolies and in persons who carry timber. Over the ischial tuberosity a similar bursa sometimes occurs in weavers. A fibroid or plastic bursitis sometimes occurs in which there is little or no serous fluid. Tuberculous, syphilitic and malignant disease could also occur. Diagnosis of malignant disease was not always obvious. Mr. Swainson said he had seen a fibrous bursa cut out which under microscopical examination proved to be sarcoma.

As to the subsequent history of the patient operated on, the wound was healed in a week.

Varicose Veins.—The same surgeon operated on a case of varicose veins in a man. There was a mass of veins below and internal to the knee. The internal saphenous vein was exposed by a transverse incision in the middle of the thigh and about an inch of the vein cut out. The vein was ligatured in two places and the wound sewn up. Next an oblique incision about nine inches long was made over the mass of varicose veins; the edges of the wound were dissected up for a short distance, and the mass of veins removed by dissection, the deep fascia being exposed. The second wound was then sewn up and a dressing firmly applied.

Mr. Swainson said that in this case, as the veins were fairly localised, it was sufficient to remove them completely, and also to tie the saphenous vein, as had been done. In cases where the varicose veins were more extensive, he pointed out that it has been recommended to make an oblique spiral incision encircling the limb and to remove all the veins thus exposed so as to more completely interrupt the circulation. This method, he thought, gave good results in cases where the veins were extensive. As to the causation of varicose veins, Mr. Swainson said that congenital and mechanical theories had been propounded, both of which seemed reasonable. Secondary varicosity of superficial veins could also be caused by thrombosis of the deep veins. The complications of varicose veins were: rupture, in which severe bleeding might occur, but which elevation and pressure would stop; phlebitis, which was an important complication, and could be treated by rest, and in some cases by ligature of the vein on the proximal side; and embolism, which was a rare complication.

According to a message from Sydney 20 deaths from plague have occurred lately in one hospital at Noumea, New Caledonia, and the outbreak is disorganising business.

TRANSACTIONS OF SOCIETIES.

HARVEIAN SOCIETY OF LONDON.

Meeting held (in the Stafford Rooms), Thursday, November 21st.

The President, Dr. H. J. Macevoy, in the Chair.

Dr. Gossage read a paper on

HEREDITY.

He pointed out that the subject of heredity was inextricably mixed up with that of evolution, and discussed the three chief theories of evolution—that of Lamarck, that of Darwin, and the Mutation theory. The evidence in favour of any of these was founded on the study of animals and plants, but they could be illustrated from human beings. Human evidence was, however, insufficient to establish any point. Lamarckism, or the inheritance of acquired characters, must be regarded as disproved by the work of Weismann. Between the other two theories it was at present impossible to decide. Darwinism failed to convince from the lack of conclusive evidence of evolution by the selection of fluctuating variations, while there were many difficulties to overcome and apparent exceptions to be explained before the Mutation theory and Mendelism could be definitely accepted.

Mr. Campbell Williams and Dr. Graham Little discussed the paper, and Dr. Gossage replied.

Mr. W. H. Clayton-Greene then read a paper on some

BACTERIAL INFECTIONS OF THE URINARY TRACT.

Mr. D. C. L. Fitzwilliams, Mr. Campbell Williams, Dr. Sydney Phillips, and Dr. Graham Little discussed the paper, and Mr. Clayton-Greene replied.

LIVERPOOL MEDICAL INSTITUTION.

Meeting Held Thursday, November 21st, 1912.

The President, Sir Robert Jones, in the Chair.

Dr. Arthur Wallace read a note on the

CONTROL OF THE CONVULSION IN ECLAMPSIA.

Dr. Wallace quoted the statistics of Strogonof, who in 400 cases lost 6.6 per cent. mothers and 21 per cent. of children, these cases being treated in hospital with the fits controlled by morphia, chloral, or chloroform He alluded to the observations of Dienst on the thromboses due to the unusual coagulability of the blood, and Englemann's suggestion that leech extract might be used to diminish the coagulation, and, therefore, the thromboses. He then alluded to Dr. Leith Murray's suggestion that injections of magnesium sulphate solution into the spinal canal might be useful in eclampsia, as it had been found useful in tetanus. Dr. Wallace had employed a 25 per cent. solution of magnesium sulphate in a dose of, approximately, 1 c.c. of solution for every 25 lbs. of body weight.

The first case, a woman æt. 30, in her third labour, had had eight fits. 4 c.c. of the solution were injected into the spinal canal, and there were no more fits for seven hours. Spontaneous delivery occurred five hours after the last fit, a live child was born, and a slight convulsion occurred three-quarters of an hour after; the patient was unconscious for some hours after, but made a good recovery.

The second case was a primipara. She had had six well-marked fits. The injection was given, with no fit for four hours. A second injection was given, as the attacks had recurred. There was spontaneous delivery and ultimately recovery.

Dr. Leith Murray, in discussing the note, spoke of the frequency with which cerebral hæmorrhage was found to be the cause of death. He did not think harm could be done by the injection of magnesium sulphate solution, as it would be a simple matter if there was any embarrassment of respiration to wash out the spinal canal with an isotonic solution.

Dr. Lloyd Roberts read a short paper on the

EARLY SYMPTOMS OF MEDIASTINAL TUMOURS.

He had treated recently 36 cases. The symptoms were due to the pressure on adjacent structures. Dr. Roberts especially drew attention to the symptoms of venous obstruction, and more particularly to pressure on the large azygos vein. When that was pressed on, as in a case of mediastino-pericarditis, there was general anasarca of the body, with effusion into the peritoneal and pleural cavities, but with no abnormality of the urine. The heart in these cases was normal, the beat slow and regular, no murmur, the symptoms being due to pressure on the superior vena cava and right auricle. Where the azygos vein was pressed on in the upper part of its course, there was serous effusion mostly in the abdominal walls, loins, and lower limbs, and no proportional peritoneal effusion. In most cases the effusion was bi-lateral, but in some cases unilateral, and then the pressure could be located to the region below the 9th dorsal vertebra, where the veins of the two sides joined.

Respiratory obstruction was a frequent early symptom, which might be found alone or more usually with venous obstruction. As had been pointed out by Dr. Glynn, there was in these cases marked alteration in vocal fremitus. Dyspnœa on exertion was a usual symptom, but was seen, especially in cases of gummata, out of proportion to the size of the growth.

Pressure on nerves gave rise to early symptoms; pressure on the intercostals gave pain in the back and sides, and was mistaken for pleuritic pain. Pressure on the phrenic in some cases had given rise to pain in the shoulder, through the communication with the superior acromial nerve. Pressure on the sympathetic gave rise to unequal pupils. Pressure on the vagus gave laryngeal paralysis and alterations in pulse rate, and in occasional cases to dysphagia, vomiting, or hiccough.

Dr. T. R. Glynn congratulated Dr. Lloyd Roberts, and spoke of the value of the alteration in vocal fremitus in diagnosing these tumours. Dr. Glynn had found involvement of the spinal cord not infrequent in mediastinal tumours, and in one case paraplegia had been the first sign of a growth.

Dr. John Hay alluded to the infrequency of general symptoms and cachexia in malignant disease of the root of the lung.

Dr. W. Permewan said that among the earliest symptoms, he had noted a paralysis of the vocal cords on one side only, which did not cause any alteration of the voice. He thought that paralysis of the cords was more frequently seen in aneurysm cases than in cases of malignant growth. A left-sided paralysis with no obvious cause was, in 90 per cent. of cases, due to aneurysm. Malignant disease of the œsophagus frequently gave rise to paralysis on both sides of the larynx as an early symptom.

Dr. O. T. Williams alluded to a case where a tumour which had given rise to pain, and a shadow in X-ray photograph, had disappeared under treatment, but had recurred, with a fatal result, within three years.

Dr. R. M. Buchanan said that effusion into the pleura never gave the same complete absence of fremitus that an obstructed bronchus gave. He had found an ineffective and irritative cough often an early symptom.

Dr. W. Warrington and Dr. E. T. Davies also spoke. Dr. Lloyd Roberts replied.

Dr. Francis Bailey opened a discussion on

THE TECHNIQUE OF ETHER ADMINISTRATION.

The first part of his remarks was devoted to the history of the use of ether. He then showed a variety of apparatus that had been used, from an early inhaler of Snow's to Kelly's intratracheal insufflation apparatus and Roux's apparatus for intravenous injection of ether. Dr. Bailey detailed the preparation of the patient, and discussed the use of atropine, morphia, etc. He thought they were of use in moderate doses, and given a half to three-quarters of an hour before the anæsthetic. He used a Skinner's mask covered with stockingette, a drop bottle, a ring pad round the mouth, and several layers of gauze to cover the mask. The patient was asked to breathe quietly by the mouth. As little movement as possible should be made once the anæsthesia was begun. There should be good colour and even respiration throughout, the airways should always be kept patent, the jaw could be kept forward by a finger behind the angle, and the lips open in edentulous people by the thumb in the mouth. It took six minutes to anæsthetise the average patient, using 1½ to 2 oz. of ether. Eight to 10 oz. were required for an operation lasting an hour. Patients did best with an 8 per cent. vapour. Dr. Bailey described the *technique* of intratracheal insufflation and of the intravenous method.

In the discussion that followed, Mr. R. Kelly described the experiments of Henderson, of Connecticut, who had in the laboratory reproduced all the errors of unskilful administration of anæsthetics, and so demonstrated the causes of fatalities which are ascribed to status lymphaticus, enlarged thymus gland, etc. Respiratory failure was the commoner of the two, cardiac failure accounting for the lesser proportion of cases. The real cause of the fatal failure of respiration was deep breathing and intermittent anæsthesia; the normal stimulus to the respiratory centre being the presence of carbonic acid in the blood of the centre; with over-deep breathing the carbonic acid was not present in sufficient quantity to keep the centre active. Cardiac failure was due to prolongation of the struggling stage or to pain during the intermittence of administration. Mr. Kelly advised that anæsthetics should not be mixed, and that no operation should be done under partial anæsthesia. In respiratory failure artificial respiration should be performed, and in cardiac failure massage of the heart. He had used intratracheal insufflation in 70 cases, and was quite satisfied with its action. Ether pneumonia was not due to the ether, but to septic saliva being present in the bronchi.

Mr. Thelwall Thomas laid it down as a primary rule that anæsthetics should not be mixed. He had seen as many as seventeen cases die from chloroform, and considered ether much the safest general anæsthetic. We had been brought to this opinion by the superior results obtained in America in cases of septic peritonitis, our cases did equally well when ether was the anæsthetic used. Ether should be administered without any closed bag by the open method, as Dr. Bailey had described. Atropine certainly diminished the secretions, but he did not think it was of great advantage; he rather thought cases of parotitis might be due to the arrested secretion. He thought the intratracheal method had a field of usefulness in cases where respiratory movements interfered with the operation, as in difficult gall-bladder cases, and in mediastinal and tracheal work.

Dr. Bailey shortly replied.

SPECIAL REPORTS.

GENERAL MEDICAL COUNCIL.

NINETY-SIXTH SESSION.

TUESDAY, NOVEMBER 26TH, 1912.

The President, Sir Donald MacAlister, in the Chair.

The President announced that he regretted to inform the Council that Dr. Gibson (Edinburgh) would be unable to be present on account of the state of his health. The President was pleased, however, to be able to say that Dr. Gibson was convalescent.

The official notification of the appointment of George Wilks, M.B., as Representative of the Society of Apothecaries, London, for one year from October 22nd, 1912, was read. Mr. Wilks was introduced by Dr. Norman Moore. Also that of John Christie McVail, M.D., as Crown Nominee for Scotland for five years, from October 28th, 1912. Dr. McVail was introduced by Dr. Norman Walker.

The Presidential Address.

The President then delivered the following address:—

Gentlemen,—It falls to me once more to record changes in the membership of the Council. During the summer we lost by death our colleague, Mr. Arthur Trehern Norton, C.B., who since February, 1910, had represented the Society of Apothecaries of London. Though his period of office was short, it was long enough to procure him the regard of the Council, which did not fail to appreciate his diligent attention to business, and his soldierly courtesy of bearing. In his place we welcome Mr. George Wilks, formerly Master of the Apothecaries' Society.

On Saturday we received from the Privy Council an official notification of the appointment by His Majesty of Dr. J. C. McVail as the Crown member for Scotland, in the room of his brother, Sir David C. McVail, whose fourth term of office has just expired.

In Dr. John McVail we acquire a member of high eminence and wide experience in relation to departments of the public medical service, of which from time to time the Council has of necessity to take cognisance. . . . As Vice-Chairman of the National Insurance Commission for Scotland, Dr. McVail will have it in his power to make contributions of value to the Council's discussions of a new and extremely important branch of State Medicine. . . .

The Council will learn with regret of the death of Dr. Cocking, of Sheffield, who represented the University of that city from 1905 to 1911. The published tributes to his character and services have amply confirmed the impression left upon the Council by his memory.

The Government of Ireland Bill and the Medical Acts.—In accordance with the resolution of the Council, passed *nemine contradicente* on June 4th, I communicated to the Lord President your desire that steps should be taken to procure the insertion, in the Government of Ireland Bill, of provisions reserving to the Imperial Parliament the control of legislation relating to the Medical and Dentists Acts. At the request of the Government I prepared a memorandum setting forth the general grounds on which the Council's resolution was commended to the favourable consideration of Parliament. . . . Notices by private members, proposing amendments to the Government of Ireland Bill in the general sense of your resolution, have appeared on the Order-paper of the House of Commons; but under the procedure adopted by the House they have not come up for discussion. The importance of the subject, especially in its bearing on the continued validity, for registration purposes, of qualifications granted in Ireland, appears to have impressed itself on non-official members of Parliament, and there is some ground for the expectation that, during the stage of "Report," an opportunity will be found for its consideration.

The National Insurance Act, and the rules and regulations proposed to be made thereunder, have received the careful attention of your Special Committee. . . . Through the Privy Council an early draft of the Provisional Regulations for Medical Benefit was submitted for criticism by the Committee in September last. The Committee's terms of reference appeared at first sight to limit its consideration to the effects of the Provisional Regulations "on Medical Education and Examination in relation to the efficient practice of Medicine"; but the members deemed it their duty to direct the Commissioners' attention to various other points concerning which on previous occasions the Council had formulated resolutions. In particular, the Committee reiterated the opinion of the Council to the effect that, in the absence of any sufficient provision for the "institutional" treatment of insured persons, the existing facilities for the study of clinical medicine, surgery, and midwifery, might be seriously endangered; and that the efficiency of medical education, and consequently of medical practice among all sections of the public, might thereby be impaired. The Insurance Commissioners have informed the Lord President that the Committee's suggestions were found to be exceedingly useful and valuable; and that, apart from the question of hospital facilities, which the Commissioners appear to regard as outside the present Act, effect was given to these suggestions in the Provisional Regulations as issued. It is understood that the Regulations are still subject to modification, and that negotiations to this end are now in progress. . . .

Amendment of the Medical Act.—In response to suggestions from the Council, the Lord President has prepared, and introduced into the House of Lords, a Bill for amending in a few particulars Section 8 of the Medical Act, 1886. This section governs the dates prescribed under the regulations for the election of Direct Representatives to the Council. . . . The Bill provides that the tenure of office of the present Representatives shall extend to the end of 1916, in order that the next five-years period shall begin on the first day of January, 1917. The special thanks of the Council are due to the Lord President for his effective assistance in furthering this simple but necessary administrative reform.

Registration in Canada.—It is with much satisfaction that I report the completion in Canada of the legislation necessary to provide for the establishment of a federal Medical Council and a uniform system of registration for the Dominion. . . . The organisation of the first Dominion Medical Council has been entrusted to the Secretary of State at Ottawa, who is himself a medical man. At his request our Registrar has forwarded to the new body, for its guidance, a set of the Council's publications, forms, regulations, etc. Dr. T. G. Roddick, of Montreal, to whose patient labours is due the achievement of Canadian interprovincial reciprocity through Dominion registration, has kindly promised to keep the Council informed of the future progress of the scheme.

I have also to report the completion by Mr. Harper, Solicitor to the Council, of an important volume containing an account of all the cases dealt with by the Higher Courts of Law, in which questions of the interpretation of the Medical and Dentists Acts have been raised. . . .

By your instructions the recent report on Indian candidates for professional examinations in this country was sent to all qualifying bodies and medical schools.

The Education Committee has made considerable progress with the revision of the list of recognised Preliminary Examinations held outside the United Kingdom, regarding which it has been in correspondence with the various educational authorities of the Empire. . . .

The Pharmacopœia Committee has, with the help of its editors, been engaged in preparing for press the draft of four large sections of the text of the revised *Pharmacopœia*. . . .

The Treasurers and the Registrar have instituted an inquiry into the existing methods of preparing and printing the matter contained in the *Medical Register* and the *Dentists' Register*, with a view to its clearer and more convenient presentation. . . .

Much of your time this Session will be occupied with the consideration of penal charges. . . . In this connection it is proper to record that the Home Secretary has now, at the request of the Penal Cases Committee, issued instructions to the police authorities throughout England to notify the Council of all cases in which medical or dental practitioners are convicted, whether of indictable or of other offences. . . .

Personation.—Lastly, I must call your attention to a special inquiry to be held on Thursday, for which there is no strict precedent on the medical side of our proceedings. In this case there is no "accused practitioner," as the inquiry relates to the continued appearance in the *Medical Register* of the name of a practitioner alleged to have died abroad some years ago. It is further alleged that some one, who is unqualified and therefore not subject to your jurisdiction, has been personating the deceased practitioner and practising medicine under his registered name and qualifications. If these allegations are proved, the entry in the *Register* must be erased by your direction; and the charge of personation will then have to be investigated by the criminal authorities. . . .

On the conclusion of the President's address, it was moved by Dr. Little, seconded by Dr. Norman Moore, and carried by acclamation:—"That the President be thanked for his address, and requested to let it be printed in the Minutes."

It was then moved by Dr. Norman Moore, seconded by Sir John Moore, and agreed to:—"That the thanks of the Council be conveyed to the Director-General of the Medical Department of the Royal Navy, the Director-General of the Medical Department of the Army, and the Under-Secretary of State for India, respectively, for the returns which they have again furnished to the Council, with the request that such returns may in the future continue to be furnished to the General Medical Council."

The Report by the National Insurance Act Committee in regard to representations sent to the National Health Insurance Joint Committee as to:—

(1) The possible effect of the Act on the education of students in midwifery;

(2) The Draft Regulations for the administration of medical benefit

was also received and entered on the Minutes, as well as the Report by the Executive Committee with reference to the calling in of doctors by midwives.

The Committee recommended the General Council to transmit to the Privy Council an expression of its strong disapproval of Clause 2 of the "Conditions affecting the practice of Midwifery in the Borough of Chesterfield" contained in the circular which has been forwarded.

The Clause reads as follows:—

"2. Doctors will not attend emergency notes from midwives requiring medical help, unless the patient has previously retained a doctor in case his services are required."

Moved by Dr. Norman Moore, seconded by Sir Henry Morris, and agreed to:—"That the recommendations contained in the report of the Executive Committee be adopted."

On strangers being re-admitted, after the Council had deliberated *in camerâ*, the President announced that the Registrar had been directed to restore to the *Medical Register* the name of David Thomas Jones, and to the *Dentists' Register* the name of Thomas Wafer Byrne.

The President also announced that as the result of the ballot Dr. Norman Walker had been elected a member of the Executive Committee for Scotland.

The Council then adjourned.

SECOND DAY—Wednesday, November 27th, 1912.

The President, Sir Donald MacAlister, in the Chair.

CASES OF ALLEGED UNPROFESSIONAL CONDUCT.

The Minutes of the last meeting were taken as read and, as amended, confirmed.

The Council proceeded to the consideration, adjourned from Friday, June 7th, 1912, of the case of Darabshaw Fardoonji Sanjana, formerly registered as of the Hampden Residential Club, London, but now as of Sanjan House, Kelty, Fife, L.R.C.P.Edin., L.R.C.S.Edin., L.F.P.S.Glasg. 1901.

The complainants were the British Medical Association.

At the conclusion of the proceedings on June 7th, 1912, the following decision of the Council was announced by the President:—"Mr. Sanjana: I have to inform you that the Council have deliberated on your case, and have found that certain of the facts alleged against you in the Notice of Inquiry have been proved to their satisfaction. . . .

"The Council take a serious view of the particular facts found to be proved against you; but in order to give you an opportunity of showing that your professional conduct is henceforth to be without reproach, they have postponed judgment on the facts as found until the November session of the Council. At that session you will be required to attend, and you shall then produce evidence regarding your professional conduct, testified to by medical practitioners and other persons of position who may be acquainted with your practice and conduct in the interval."

Mr. Sanjana attended in answer to his notice, accompanied by Mr. James Currie Macbeth, of Messrs. Macbeth, Macbain and Currie, of Dunfermline, his solicitor.

The British Medical Association, the complainants, were represented by Mr. Alfred Cox, their general secretary.

The President intimated that, as the complainants in this case were the British Medical Association, members of the Council who were members of that body should take no part in the consideration of this case.

Dr. Macdonald, Mr. Wilks, Dr. McVail, Mr. Verrall, Dr. Kidd, and Dr. Lorrain Smith accordingly withdrew.

Owing to a misunderstanding of the Standing Orders, Mr. Sanjana had not lodged the required evidence seventeen days before the date fixed for the resumed hearing. Mr. Macbeth therefore sought leave under Standing Order xiv., 16, to put in certain declarations. Leave was accorded.

Mr. Macbeth then read statutory declarations by Mr. James Terris, J.P., factor of the Blairadam Estate, near Kelty; Mr. Archibald Adam, J.P., of Kelty; the Rev. Alexander Shaw Adamson, minister of the Moray United Free Church, Kelty, and Mr. William Adamson, M.P. for West Fife, as to the character of Mr. Sanjana during the period of probation.

He called Mr. Sanjana as a witness. Mr. Sanjana answered questions put to him by the Legal Assessor, and from the Chair; also a question put to him by a member of the Council through the Chair.

After Mr. Alfred Cox had addressed the Council on behalf of the complainants, strangers withdrew, and the Council deliberated *in camerâ.*

On strangers being readmitted, the President announced the decision of the Council as follows:—"Mr. Sanjana: I have to inform you that the Council has not seen fit to direct the Registrar to erase your name from the *Medical Register.*"

The Council proceeded to the consideration adjourned from Friday, June 7th, 1912, of the case of John Jeeves, registered as of 163 Cemetery Road, Sheffield, M.R.C.S.Eng. 1889, L.R.C.P.Lond. 1889.

The complainants were the British Dental Association.

At the conclusion of the proceedings on June 7th, 1912, the following decision of the Council was announced by the President. Addressing Mr Jeeves, he said: "I have to inform you that the Council have found that the facts alleged against you have been proved to their satisfaction. The Council are of opinion that it is the duty of a registered medical practitioner to ascertain that an operator is a duly registered medical practitioner or dentist before administering anæsthetics for him. The Council take a very grave view of the action of practitioners who administer anæsthetics for unregistered persons. They have, however, postponed judgment on your case till the November session, when you will be required to produce evidence, satisfactory to the Council, as to your professional conduct in the interval."

Mr. Jeeves attended in answer to his notice. He was not accompanied by counsel or solicitor.

The British Dental Association, the complainants, were represented by Mr. R. W. Turner, counsel, instructed by Messrs. Bowman and Curtis-Hayward, solicitors.

Mr. Jeeves read testimonials as to his character during the period of probation from Dr. Robert B. Greaves, Dr. E. B. Hazleton, and Mr. W. W. Banham, M.R.C.S., L.R.C.P., medical practitioners, of Sheffield.

He answered questions put to him from the Chair and by Mr. R. W. Turner on behalf of the complainants.

Strangers having been readmitted, after the Council had deliberated *in camerâ,* the President announced the decision of the Council as follows:—

"Mr. Jeeves: I have to inform you that the Council has not seen fit to direct the Registrar to erase your name from the *Medical Register.*"

The Council proceeded to the consideration, adjourned from June 5th, 1912, of the further report of the Dental Committee on the case of William John Watson, registered as of 8 New Street, Birmingham, in practice before July 22nd, 1878.

At the conclusion of the proceedings on June 5th, the following decision of the Council was announced by the President to counsel for the complainants, the British Dental Association:—

"Mr. Turner: I have to announce that the report of the Dental Committee has been referred back to it for further inquiry and report."

Mr. Watson did not attend in answer to his notice, nor was he represented by counsel or solicitor.

The British Dental Association, the complainants, were represented by Mr. R. W. Turner, counsel, instructed by Messrs. Bowman and Curtis-Hayward, solicitors.

The Registrar read the further report of the Dental Committee.

Mr. Turner did not seek leave to address the Council on the report.

Strangers having been readmitted, after the Council had deliberated *in camerâ,* the President announced the judgment of the Council as follows:—

"Mr. Turner, in Mr. Watson's absence, I have to inform you that the Council does not see fit to direct the Registrar to erase from the *Dentists' Register* the name of Mr. William John Watson."

The Council proceeded to the consideration of the Report of the Dental Committee on the case of George William Thomas Arrowsmith, registered as of Whitstable, Kent, in practice before July 22nd, 1878, who had been summoned to appear before the Committee on the following charge:—"That being a registered dentist you have permitted an unqualified person named F——— J——— Oaten to practise in your name or in partnership with or as assistant to you as a dentist at Westcliff House, Oxford Street, Whitstable, and that you have thereby enabled him to practise as if he were qualified. And that in relation thereto you have been guilty of infamous or disgraceful conduct in a professional respect."

The complainants were the British Dental Association.

Mr. Arrowsmith did not attend in answer to his notice, nor was he represented by counsel or solicitor.

The British Dental Association, the complainants, were represented by Mr. R. W. Turner, counsel, instructed by Messrs. Bowman and Curtis-Hayward, solicitor.

The Registrar read the notice and the report of the Dental Committee, and Mr. R. W. Turner addressed the Council as to the facts.

Strangers having been readmitted, after the Council had deliberated *in camerâ,* the President announced the judgment of the Council as follows:—

"Mr. Turner: In the absence of Mr. Arrowsmith I have to inform you that, on the facts found in the report of the Dental Committee, it has been proved that George William Thomas Arrowsmith has been guilty of infamous or disgraceful conduct in a professional respect, and that the Registrar has been directed to erase from the *Dentists' Register* the name of George William Thomas Arrowsmith."

The Council proceeded to the consideration of the case of Alfred Arthur Austin, registered as of 86 Sherlock Street, Birmingham, L.A.H.Dubl. 1887, L.R.C.S.Irel. 1887, who had been summoned to appear before the Council on the following charge:—

"That, being a registered medical practitioner, you were on July 10th, 1912, convicted at the Birmingham Assizes of feloniously killing and slaying one Lena Kinmond, and sentenced to seven years' penal servitude."

Mr. Austin was not represented by counsel or solicitor.

The Registrar having read the notice, the Council's solicitor, in the absence of a complainant, laid the facts before the Council. He read the certificate of conviction, and extracts from the transcript of the shorthand writer's notes.

This closed the case.

Strangers having been readmitted, after the Council had deliberated *in camerâ,* the President announced the judgment of the Council as follows:—"Mr.

Harper: I have to announce that the Council has come to the following decision:—

"That Alfred Arthur Austin, having been proved to have been convicted of the felony alleged against him in the Notice of Enquiry, the Registrar has been directed to erase from the *Medical Register* the name of Alfred Arthur Austin."

The Council proceeded to the consideration of the case of Herbert Alfred de Pinna, registered as of 20 Grosvenor Street, W., M.R.C.S.Eng., L.R.C.P.Lond. 1905, who had been summoned to appear before the Council on the following charge:—

"That, being a registered medical practitioner, you were on May 1st, 1912, convicted at the Chertsey Petty Sessions of the following misdemeanour, namely, of exposing your person, and were sentenced to six weeks' imprisonment in the second division, which sentence was on July 2nd, 1912, on appeal by you to the Surrey Quarter Sessions, altered to a fine of £50, and you were ordered to pay the costs of the appeal."

Mr. de Pinna did not attend in answer to his notice, but was represented by Mr. Elvey Robb, solicitor.

The Registrar having read the notice, the Council's solicitor, in the absence of a complainant, laid the facts before the Council. He read the certificate of conviction, and the judgment of the Surrey Quarter Sessions.

Mr. Robb addressed the Council on behalf of Mr. de Pinna, who was abroad at the time that the summons was issued, and asked that the case might be adjourned for six months in order that he might bring forward evidence as to Mr. de Pinna's state of mind at the time that the offence was committed, and as to the state of his general health.

He answered questions put to him by Mr. Bodkin in regard to the case.

Mr. Harper addressed the Council in reply. Mr. Robb answered further questions put to him through the Legal Assessor and by members of the Council.

Strangers having been readmitted, after the Council had deliberated *in camerâ*, the President announced the decision of the Council as follows:—

"Mr. Robb: I have to inform you that the Council has found the conviction for misdemeanour proved against Mr. de Pinna, but that judgment has been postponed until the next session of the Council in May."

The Council proceeded to the consideration of the case of William Arnold Thomson, registered as of Castle Hill, Maidenhead, L., L.M. 1869, K.Q.C.P. Irel., L., 1869, F. 1874, R.C.S.Irel., who had been summoned to appear before the Council on the following charge:—"That, being a registered medical practitioner, you were on May 14th, 1912, convicted at the Central Criminal Court of feloniously and unlawfully using an instrument with intent to procure miscarriage, and sentenced to three years' penal servitude."

Mr. Thomson was not represented by counsel or solicitor.

The Registrar having read the notice, the Council's solicitor laid the facts of the case before the Council. He read the certificate of conviction, a letter from Mrs. Thomson, dated November 5th, 1912, extracts from the depositions taken at the hearing of the case, and from *The People* newspaper, of May 19th, 1912.

This closed the case.

Strangers having been readmitted, after the Council had deliberated *in camerâ*, the President announced the judgment of the Council as follows:—"I have to announce that William Arnold Thomson, having been proved to have been convicted of the felony alleged against him in the Notice of Inquiry, the Registrar has been directed to erase his name from the *Medical Register*."

The Council proceeded to the consideration of the case of George Bell Todd, registered as of 40 Lansdowne Crescent, Glasgow, M.B., M.S. 1884, Univ. Glasg., who had been summoned to appear before the Council on the following charge:—

"That, being a registered medical practitioner, you were on June 3rd, 1912, convicted in the High Court of Justiciary on four charges of procuring abortion (to which charges you pleaded guilty) and were sentenced to seven years' penal servitude."

Mr. Todd was not represented by counsel or solicitor.

The Registrar having read the notice in the absence of a complainant, the Council's solicitor laid the facts before the Council. He read the certificate of conviction and the Judge's observations in passing sentence, and a letter of acknowledgment of the receipt of his notice by Mr. Todd.

Strangers having been readmitted, after the Council had deliberated *in camerâ*, the President announced the judgment of the Council as follows:—

"I have to announce that George Bell Todd, having been proved to have been convicted of the felony alleged against him in the Notice of Inquiry, the Registrar has been directed to erase from the *Medical Register* the name of George Bell Todd."

The Council proceeded to the consideration of the case of Charles Ernest Turner, registered as of 186 Camberwell Road, S.E., M R.C.S., L.R.C.P., 1898, who had been summoned to appear before the Council on the following charge:—

"That, being a registered medical practitioner, you were on October 16th, 1912, convicted at the Central Criminal Court of feloniously using an instrument with intent to procure miscarriage and were sentenced to six months' imprisonment with hard labour."

Mr. Turner did not attend in answer to his notice, but was represented by Mr. Jenner, managing clerk of Messrs. Wansey, Stammers and Co., solicitors.

The Registrar having read the notice in the absence of a complainant, the Council's solicitor laid the facts before the Council. He read the certificate of conviction and extracts from the shorthand notes of the Reporter of the Court.

Mr. Jenner applied for an adjournment of the hearing till the following day, as his principal, Mr. Stammers, was unable to be present that day owing to a previous engagement.

Mr. Jenner, on question from the Chair, stated that he had no objection to the presence of Mr. Bodkin as Legal Assessor, although he was aware that Mr. Bodkin had taken part in the prosecution at the trial in the High Court.

The Legal Assessor questioned Mr. Jenner as to the nature of the evidence which his principal desired to bring forward.

Strangers having been readmitted, after the Council had deliberated *in camerâ*, the President announced that the hearing of this case would be resumed tomorrow at 2 o'clock p.m.

Moved by Sir John Moore, seconded by Dr. Norman Moore, and agreed to:—

"That the Report by the Public Health Committee in reference to the D.P.H. be received and entered in the Minutes."

Moved by Sir Charles Ball, seconded by Sir Thomas Fraser, and agreed to:—

"That the Report by the Examination Committee on the Returns as to examinations for the Services be received and entered in the Minutes."

The Council received the following nominations from the Scottish Branch Council of a member in the place of Sir David McVail:—Examination Committee: Dr. Norman Walker. Public Health Committee: Dr. McVail. National Insurance Act Committee: Dr. Cash.

Moved by Sir Thomas Fraser, seconded by Dr. Mackay, and agreed to:—

"That the nominations of the Scottish Branch Council be adopted."

The Council then adjourned.

THIRD DAY.—Thursday, November 28th.

The President, Sir Donald MacAlister, in the Chair.

The Council considered the case, adjourned from Wednesday, November 27th, of Charles Ernest Turner, registered as of 186 Camberwell Road, S.E., M.R.C.S., L.R.C.P., 1898, who had been summoned to appear before the Council on the following charge: "That being a registered medical practitioner you were on October 16, 1912, convicted at the Central Criminal Court of feloniously using an instrument with intent to procure miscarriage, and were sentenced to six months' imprisonment with hard labour."

Mr. Turner did not attend, but was represented by Mr. Stammers, his solicitor, who addressed the Council suggesting further adjournment. After Mr. Harper had replied, the Council deliberated *in camerâ*, and on strangers being re-admitted the PRESIDENT announced that the Registrar had received orders to erase the name of Charles Ernest Turner from the *Medical Register*.

The Council then considered the case of Richard Henry Barber, registered as of 69 Victoria Road, New Brighton, Cheshire, Scottish Triple qualification, 1888. The person practising at that address had received the following notice of an inquiry to be held at which he had been invited to attend :—

"1 New Court, Lincoln's Inn, W.C.,
"November 15th, 1912.

"Sir,—On behalf of the General Medical Council I have to give you notice that on Thursday, the 28th November, 1912, at 2 p.m., the Council will hold an inquiry at 299 Oxford Street, London, W., for the purpose of ascertaining whether the person registered in the *Medical Register* with the name and particulars as follows :—

Name.	Address.	Date of Registration.	Description and Date of Qualification.
RICHARD HENRY BARBER	69, Victoria Rd., New Brighton, Cheshire.	1888. Nov. 1 E.	Lic. R. Coll. Phys. Edin. 1888 : Lic. R. Coll. Surg. Edin, 1888 ; Lic. Fac. Phys. Surg. Glasg. 1888.

is deceased, and whether the said entry has been incorrectly made or fraudulently caused to be made in the said *Register* and should be erased therefrom.

"This notice is sent to you as the person now or lately carrying on practice as a legally qualified medical practitioner in the name of Richard Henry Barber at 69 Victoria Road, New Brighton, aforesaid.

"I am instructed to add that you may attend the inquiry personally, or may be represented by a solicitor with or without counsel. Any communication or application which you may desire to make relating to the matter of inquiry should be addressed to the Registrar of the Council at 299, Oxford Street, London, W., without delay.

Yours obediently,
"CHARLES J. S. HARPER,
"Solicitor to the General Medical Council.

"Richard Henry Barber,
"69 Victoria Road,
New Brighton, Cheshire."

The informants were the Medical Defence Union.

No person answered to the name on its being called. Dr. BATEMAN addressed the Council and examined Mrs. Barber, who had been called as a witness. She asserted that the signatures which had come to the Council were not those of her late husband.

After the Council had deliberated *in camerâ*, the PRESIDENT announced that the name of Richard Henry Barber would be deleted from the *Register*, as Richard Henry Barber was dead.

The PRESIDENT also expressed the thanks of the Council to Dr. Bateman for the trouble he had taken over this case.

The Council next considered the report of the Dental Committee on the case of Alexander Watson, who had been summoned to appear before the Committee on the following charge :—

"That, being a registered dentist, you were, on September 4th, 1912, convicted at the Eastern Police Court, Glasgow, of the following offence—namely, of being guilty of publicly exposing your person, and were sentenced to thirty days' imprisonment."

"It appeared to the Committee that the case was one which, from the trivial nature of the offence, and from the circumstances under which it was committed, does not call for erasure from the *Register*."

Mr. Alexander Watson attended and addressed the Council, which then deliberated *in camerâ*. On strangers being re-admitted, the PRESIDENT announced that the Registrar had not been directed to erase the name of Alexander Watson.

The Council then considered the report of the Dental Committee on the case of Alfred James Futcher, registered as of 26 Pretoria Road, Southsea, in practice before July 22nd, 1878, who had been summoned to appear before the Committee on the following charge :

"That, being a registered dentist, you were on October 10th, 1912, convicted at the Portsmouth Quarter Sessions of the following misdemeanours—namely :

"(1) On May 5th, 1909, of obtaining from the North Borneo State Cigar Syndicate, Ltd., 100 cigars with intent to defraud.

"(2) On May 26th, 1909, of obtaining from the North Borneo State Cigar Syndicate, Ltd., 200 cigars with intent to defraud.

"(3) On September 6th, 1911, of obtaining from Jacob Winter one buckle ring and one signet ring with intent to defraud, and were sentenced to nine months' imprisonment in the second division."

Mr. Futcher did not appear. After the Council had deliberated *in camerâ*, the PRESIDENT announced that the name of Alfred James Futcher would be erased from the *Dentists' Register*."

Proposed by Sir C. BALL, seconded by Dr. NORMAN MOORE, and agreed to, that the report of the Examination Committee on the examinations of the Apothecaries' Hall, Dublin, be received and entered on the Minutes.

Proposed by Sir C. BALL, and seconded by Sir J. FRASER, that the recommendation of the Committee be adopted. With the consent of his seconder this was withdrawn, and the proposer obtained leave to delete the last two paragraphs of the report.

Proposed by Dr. ADYE CURRAN, seconded by Dr. LATIMER, "That the Reports from the Apothecaries' Hall of Ireland be discontinued until such time as the Council may direct. An amendment was moved by Dr. MACKAY, seconded by Dr. NORMAN WALKER, "That Dr. Adye Curran's motion be referred to the Examination Committee for consideration and report at the next meeting of the Council." This was carried and agreed to as a substantive motion.

Moved by Dr. NORMAN MOORE, seconded by Dr. NORMAN WALKER, and agreed to: "That the report of the Students' Registration Committee be received, entered in the Minutes and approved."

Moved by Dr. MACKAY, seconded by Sir CHRISTOPHER NIXON, and agreed to: "That the interim report by the Education Committee be received and entered in the Minutes" :—

"The Committee report with reference to their proposals for raising the standard of the Preliminary Examination in General Knowledge that they are at present engaged in conferring with Indian and Colonial Examining Bodies, that they now propose to consult the Government and University Bodies of the United Kingdom, and that they intend to report to the Council on the whole subject at the Session of May, 1913."

Moved by Dr. NORMAN MOORE, seconded by Sir JOHN MOORE, and agreed to that the report of the Pharmacopœia Committee be received and entered on the minutes and approved.

The Committee recommended that Dr. Cash, now an additional member, be appointed an ordinary member in the place of Sir David McVail.

Strangers then, by direction from the chair, withdrew in order that the Council might deliberate on an item of business *in camerâ*.

Moved by Sir CLIFFORD ALLBUTT, seconded by Dr. LANGLEY BROWNE: "That the Insurance Act Committee be instructed to consider in the interests of medical education the means and arrangements under the Act for providing those aids to diagnosis, treatment and research which modern pathology has made available, and be authorised to make representations to the authorities concerned on these and any other matters arising out of the Act which come within the functions of the Council."

After a discussion, in which Sir J. Fraser, Dr. Norman Moore, Sir C. Nixon, Sir H. Morris, Dr. Saundby, Dr. Little and Dr. Macdonald took part, the motion was carried.

Moved by Dr. Norman Moore, seconded by Sir H. Morris, and agreed to unanimously: "That the best thanks of the Council be given to the President for his able services in the chair during the present session."

The Council then rose.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Nov. 30th, 1912.

Treatment of Tuberculosis.

The treatment of consumption is: (1) Symptomatic, relieving the cough, diminishing the fever, the sweats, but deceives the patient and discourages the attendant; (2) hygienic, rest, aeration, alimentation, to which is also added remineralisation; (3) treatment by serum and tuberculin.

Such are the three methods at the disposal of the medical attendant. To which should the preference be given? To the second or hygienic treatment, says Prof. Brunon, for the others should only come in as auxiliaries.

The hygienic treatment might seem to be easy, but such is far from being the case; its application requires great tact on the part of the attendant, patience and ingenuity so as to vary according to each case a treatment apparently uniform for all.

Therapeutic rest means cessation of all work, manual or intellectual, the horizontal position and rest of the organ (respiration, cough, phonation, etc.)

Cessation of work should be immediate and absolute, independent of any sacrifice.

The horizontal position is rather difficult to regulate. In any case where the malady is in evolution with fever, the temperature should be taken with great exactitude—tachycardia, the patient should be ordered to keep his bed, for the temperature will yield only on that condition. The duration of the cure may last for weeks or months, but as long as the fever continues he must not leave his bed.

Two beds should be at his disposal, one for the day, the other for the night. The day bed may be placed near an open window, for 7 or 8 hours, according to the season.

When the fever has disappeared eight or ten days, the air cure on a reclining chair may be commenced. An ordinary armchair should not be used, as the patient should repose at ease at his full length. The cure in the open air is begun at 8 or 9 o'clock according to the season or the desire of the patient, and up to noon. After dinner he may walk about the garden half an hour or so, and then return to the chair until evening, or from 6 to 8 hours repose in the day, and some time afterwards the hammock may replace the reclining chair while short promenades may be allowed. At this period the weighing machine takes more or less the place of the thermometer. The patient ought to increase progressively in weight.

However, the exercise must be controlled by the thermometer; if the temperature rises somewhat after walking, more rest should be imposed. Short excursions on the sea, horse riding or car riding give good results, but skating, cycling or drives in automobiles should not be encouraged. If the patient returned from his walk in a state of moisture, he should be rubbed with eau-de-Cologne and put to bed for two or three days.

Among the possible evil effects of exercise are dyspnœa, tachycardia, arterial hypotension.

Rest of the organ, discipline of the cough, cure of silence.

Respiration, phonation, cough, should be placed under certain rules from the beginning of the treatment. Long conversations, singing are forbidden. The patient must learn to keep his cough under control and only cough to expectorate. In certain cases (hæmoptysis) a cure of absolute silence is obligatory. The same may be said of tuberculosis of the larynx, where silence does more effectual good than any local treatment.

The efficacy of rest is frequently very rapid. The moral and physical condition of the patient is improved, appetite returns, dyspnœa relieved as well as the cough, and sleep is possible.

The physical signs are reduced to the minimum. However, it sometimes happens that all these advantages are only transitory.

One must be very prudent and be armed with great patience.

Iodide of Potassium in Syphilis.

Iodide of potassium, says Prof. Gaucher, is an excellent adjuvant of mercury but should not be employed indiscriminately. Associated with mercury the iodide increases its action and consequently is prescribed in all the periods of the malady and more especially in the tertiary period where it acts like a charm on gummata.

The counter-indications are first intolerance. From some reason as yet unknown, many persons are unable to take iodide of potassium, which produces on them a disagreeable sensation of congestion in the head, headache, coryza, etc. Hence the necessity of testing the susceptibility of the patient by commencing with small doses.

In lesions of the larynx the iodide should never be given on account of its congesting properties, which might be followed by hæmorrhage.

In a patient suffering from pulmonary consumption as well as syphilis, iodide of potassium should not be prescribed for the same reasons. It is also excluded in acute nephritis with dark and scanty urine, but in amyloid degeneration of the kidney where the urine is abundant and clear, iodide of potassium may be given with benefit.

To conclude: abstention in lesions of the larynx and great prudence in pulmonary and renal affections.

GERMANY.

Berlin, Nov. 30th, 1912.

At the Gesellschaft für Sociale Medizin, Hygiene und Medizinal Statistik Hr. Prinzing read a paper on the

Great Epidemic of Typhus Fever

in connection with the Russian Campaign, 1813. He said that since the Thirty Years' War there had never been such a great epidemic of typhus of which so little had been known, and especially as regarded the number of victims. It was a double epidemic, the first, associated with the retreat of the French from Russia, and chiefly fell on Prussia and died out in May, 1813. The second followed the campaigns in Saxony and Silesia, and spread over West and South Germany, Switzerland, Austria and France.

Already in Moscow 1,000 cases of typhus had to be left behind, and in the retreat many soldiers fell victims. In Wilna, where the Russians took 30,000 prisoners in the beginning of December, the hospital was crammed full; without fire and without food the sick and dead lay together on foul straw. Of 25,000 inmates of the hospital only 2,500 were left alive by the end of January. Of the Jewish population in and around Wilna, 55,000 died, the Russian army had 62,000 dead, the Eastern Provinces and Russian Poland were overrun with the disease.

In the West the disease began in the summer of 1813, brought in by troops from Austria. After the Passage of the Nieman the dregs of the army scattered in all directions, spreading the disease wherever they went, especially at depots along the military roads, for example, Gumbinnen, Königsberg and Danzig. The latter town had 4,000 deaths from the disease during the siege from January to July in a garrison of 36,000 men and a civil population of 4,000. Berlin was attacked in May, 1813. In the Charité, Horn and Hufeland succeeded in preventing the spread of the disease to the healthy by strict isolation and fumigation of the patients' belongings. From Berlin the whole provinces of Brandenburg and Saxony were infected, where chiefly Torgau had 6,000 cases of the disease, with 434 deaths. Bavaria, where the danger was recognised in time, and the returning suspected troops were isolated in hospitals, was but slightly affected, and the same in Würtemburg, where in 18 communities 165 persons took the disease, with 20 deaths.

During the campaign in Saxony and Silesia the disease which had died out was lighted up afresh, about the middle of May, caused by bodies of Russian and French troops. After the Battle of Katzbach, in Upper Silesia, 9,000 persons died. Then followed Dresden and Leipzig, where 30,000 wounded were left after the battle uncared for in the streets. A total of 80,000 French perished from the pestilence. In Mainz the grave-diggers refused their services, and the frozen bodies lay in heaps before the doors until the setting in of mild weather compelled them to commit the dead to the flames.

In Hamburg a great epidemic began during the siege at the end of 1813; the fugitives and the inhabitants, driven out by Davoust, spread the infection into the neighbouring cities. Between November, 1813, and June, 1814, Bavaria had 18,000 cases of typhus, with 3,024 deaths. It was the same in Würtemberg, where half of the medical attendants contracted the disease. In Prussia 200,000 died from the disease, corresponding to a morbidity of about 2,000,000, *i.e.*, a tenth of the population of Prussia.

Incomplete hospital accommodation and attendance contributed to the extension of the disease. Citizens called in to assist soon returned home carrying the infection with them. From want of room in the hospitals, convalescents were sent out too soon. Hildebrandt looked upon the disease as one by itself, others thought it was brought about by fatigues of marching and want of food, that it was infectious later, but that it constantly broke out afresh. A Saxon physician thought isolation was injurious, that the disease was rendered more violent by it. Although Hufeland was aware that Cüstrin, although besieged, escaped the disease, he was never quite certain that it spread from person to person. In the French lazarettes there was want of cleanliness. The treatment consisted in fresh air and douching; bleeding did harm. Patients who had to lie in the open air did better than those treated in hospital.

Could such an epidemic be avoided in any future great war? German military sanitation was on the highest footing, but if that of an enemy was not equally without reproach such an epidemic could not be avoided. In 1869 small-pox raged in France, especially where the war was carried. Whilst our well vaccinated troops only suffered slightly, 200,000 French died of small-pox in France. Through the transport of prisoners the disease was carried into Germany, where the epidemic of 1871 and 1872 carried off 17,000 persons, four times as many as fell victims in battle. War authorities as well as the civil population, then, were equally interested in protecting troops from epidemics. It was the duty of the State to assist communities financially in making preparations. Great caution must be exercised in the transport of prisoners, and in the return of troops from the front if they had been engaged in an infected territory. Japan had protected itself from the cholera by causing the troops returning from the Russo-Japanese war to undergo quarantine on three islands. The modern fight against epidemics was of recent origin; it was bound up with the name of Robert Koch.

AUSTRIA.

Vienna, Nov. 30th, 1912.

Mediastinotomy.

Schlemmer, at the Gesellschaft, presented a patient who had been taken into hospital suffering from a deep phlegmonous mediastinitis, being acute, with a large amount of purulent matter, was freely opened on the right side. The history of the case is a long one, as from childhood she had suffered from tubercular disease in the lumbar portion of the spine, from which she gradually recovered. In the early part of spring and summer of this year she suffered from furunculosis. One of these occurring under the right eye produced lymphangitis and lymphadenitis, which, under conservative treatment with antiphlogistic measures, receded within 14 days. A little later, however, another furuncle appeared on the neck about three finger breadths below the mastoid process dexter. Forming an abscess, a slight incision was made merely to relieve the tension, but not sufficient to clear the whole out. A few days later a large swelling formed, with purulent matter oozing from the mastoid process. From this it was suspected that the abscess had gone deep down into the mediastinum, which was freely opened and drained and the patient kept with her head lower than the body.

Herpes Zoster.

Zumbusch brought forward a man, æt. 74, with an aberrant form of vesicle resembling herpes zoster. The whole skin from the hair of the head to the feet was covered with these vesicles.

Hermann said he had seen several cases of this sort of vesicle on the second or fourth day after an attack of herpes zoster, and to him they appeared a varicele universal exanthema of the skin. He found it general over the mucous membrane, and even epidemic sometimes, which corresponded to a general infection, which may be considered a virus in the blood exhausting itself in the skin.

Rupture of the Spleen.

Khautz exhibited a lad, æt. 12, who had been received into hospital with rupture of the spleen, which had been extirpated shortly after reception. On laparotomy being performed, upwards of a litre of dark fluid blood was found in the hypochondrium, and in the upper part of the spleen, near the hilus, a wide tear in the organ, the result of the accident. The patient made a good recovery. He showed a preparation of a spleen from another patient who had been operated on after an accident in a motor car. This case was more complicated, as the patient had fracture of the right side of the skull and was unconscious, but the fever assisted the diagnosis with the blood found in the abdomen, but the pain in the left shoulder, which was severe in the first case, was masked by the unconscious condition of the second.

UNITED STATES OF AMERICA.

New York, Nov. 21st, 1912.

Clinical Congress of Surgeons of North America.

(*Concluded from our last issue.*)

Crile's Method of Anæsthesia.

At the meeting in the Waldorf-Astoria Hotel on the evening of November 12th, Dr. George W. Crile, of Cleveland, Ohio, read a paper on the method of anæsthesia and anoci-association. This method has been described already in the Medical Press and Circular, and it only remains to be said that Dr. Crile again asserted that the mortality rates had been greatly reduced in his clinics in Cleveland by the employment of this form of combination anæsthesia. He added that nitrous oxide was superior to ether as a general anæsthetic, because it protected the blood cells by diminution of oxidation. In addition to this, the exclusion of harmful stimuli enabled the patient to become safely and agreeably unconscious for the proposed operation.

Dr. Otfrid Foerster, of Breslau, Germany, discussed indications and results of

Excision of the Posterior Spinal Roots

in man. This paper was for the most part an enumeration of the number of operations of this kind he had performed for the relief of various diseases and affections.

Dr. Charles H. Frazier, of Philadelphia, dealt with some problems and procedures in the surgery of the spinal canal.

Dr. D'Orsay Hecht, of Chicago, read a paper on the "Surgery of the Spinal Cord" from the neurological standpoint, and in the course of his remarks said that with regard to serous meningitis he took issue with the text-book view that treatment should be largely surgical. Their diagnoses were not clinically refined, and they could not advance far until more of the psychical side was put before them.

Perhaps, on the whole, the most interesting event of the meeting, that is so far as reading of papers and discussion were concerned, was the symposium on

Intestinal Stasis

which was held in the ballroom of the Hotel Waldorf-Astoria on the evening of November 14th. Dr. R. R. Smith, of Grand Rapids, Michigan, the first speaker, discussed enteroptosis in women, and then

Mr. Arbuthnot Lane, of London, in a long and able paper, gave his views on chronic intestinal stasis and its treatment. He recognised the fact that much of the ill-health of enteroptic women, and indeed of a very large number of sufferers, was due to auto-intoxication, a result of delay of the stomach and large and small intestines in emptying themselves, especially the small intestine. Furthermore, owing to the poisoning of the entire system by poisons generated by intestinal stasis, and which enter the blood stream, a large variety of ailments and diseases may be attributed to this cause. Even such remote diseases as cancer and tri-facial neuralgia. Mr. Lane stated that he had obtained excellent results by short-circuiting the bowels in such a manner as to remove the obstruction and to cut out a large amount of the absorbing surface, thus preventing auto-intoxication to a large extent. Mr. Lane described the way in which obstruction might be gauged by means of bismuth and the X-rays, and demonstrated this by illustrations on the screen.

Dr. John F. Clark, of Philadelphia, took a far more conservative view with respect to operative procedures for the relief of intestinal stasis. He drew attention to the severity of such operations, and said that he was of the opinion that these cases should be selected with the greatest care, and operations performed only when every other means had failed to relieve an otherwise thoroughly deplorable state of health.

Dr. Robert C. Coffey, of Portland, Oregon, read a paper entitled "replacing and retaining operations in the treatment of gastric and intestinal stasis," in which he reviewed the operations performed and suggested for these conditions. He also gave the results of operations done by himself which, while less serious than some of those which had been proposed, have met with almost no primary mortality, and have resulted in marked benefit to the patient.

Dr. Joel E. Goldthwait, of Boston, Massachusetts, who is an orthopædic surgeon, stated that he held the view that deformities such as round shoulders, changes in spinal configuration and flat, collapsed chest conditions, which invariably accompany visceral prolapse, were largely causative in producing it. Thus the treatment of the intestinal stasis by medical or surgical means was incomplete unless the strain were removed.

The Cancer Problem.

Of course, this perennial subject was discussed at the meeting. A large number of the visiting surgeons went to the laboratories of the Rockefeller Institute for Medical Research when Dr. Peyton Rous explained his methods for studying cancer. Dr. Rous made this statement :—"I believe that a cure for cancer will be discovered before the cause of the disease is known, but whether this will be in our lifetime, naturally I am unable to say." Moreover, the Clinical Congress decided that the time had come for the medical profession to conduct a campaign of publicity throughout the country in order to let everyone know the importance of early operation in the disease. The Congress accordingly passed the following resolutions :—"Be it resolved, That the time has arrived when, if the surgeons of America are to do their duty to the citizens of this country, a campaign of publicity should be at once undertaken to bring to the attention of every woman in this country the early symptoms of cancer of the womb, and to point out that if the disease be detected in the early stages it can often be cured. Be it further resolved, That this society at once appoint a committee of five, to be named by the President of the Congress, to disseminate this information. And further, That this committee be instructed to write, or have written, articles to be published in the daily Press, the weekly or monthly magazines, as may prove most expedient. And, further, that they report their progress for the year to the next annual meeting. Dr. Edward Martin, of Philadelphia, President of the Congress, appointed the following surgeons as a committee to carry out the purposes of the resolutions. Dr. Thomas S. Cullen, of Baltimore, Chairman, Dr. Thomas Howard C. Taylor, of New York City, Dr. C. Jeff Miller, of New Orleans, Dr. F. F. Simpson, of Pittsburg, and Dr. E. C. Dudley, of Chicago.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

Critical Financial Position of the Western Infirmary.

Sir Matthew Arthur presided at the 38th annual meeting of contributors to the Western Infirmary, and moved the adoption of the report, remarking that so far as treatment of patients was concerned they had accomplished a satisfactory year's work. The number of outdoor patients was 9,142, showing an increase of 146 over the previous year. Unfortunately there was a slight decrease in their ordinary revenue—not due to a falling off in contributions; the subscriptions from employees were quite 8 per cent. more than last year. The net result was that after expending the ordinary and extraordinary income their capital had been reduced by £6,989 in order to meet the deficit in the years' workings. He thought they all realised that the financial position of the Infirmary was far from satisfactory. The unrestricted capital of £6,612 was but a slender reserve when their annual ordinary expenditure exceeded £40,000. The financial support they received had not grown with the growth of the Infirmary, probably because the public did not altogether realise that growth. There were always patients waiting admission, so their admissions were not in excess of the needs of the community. They could not expect any reduction in the cost of the beds, and the only way to economise was to reduce the number of patients. It would be most unfortunate if the usefulness of the Infirmary were to be in any way impaired by the lack of funds, and they very earnestly appealed for increased support.

Glasgow Proposals as to the Lister Memorial.

A meeting of the Executive Committee was held in the City Chambers, under the presidency of the Lord Provost, and amongst others present were Sir Hector Cameron, Mr. A. E. Maylard, and Mr. J. D. Hedderwick. The principal business was to receive a deputation from the Royal College of Surgeons of Edinburgh, which deputation comprised the President of the College (Professor Caird), the ex-President (Mr. George A. Berry), and Mr. Stiles; and to discuss the practicability of co-operation between the two cities in establishing a Scottish national memorial to Lord Lister. It was suggested that the memorial might take the form of laboratories for research, but after a lengthened interchange of views it was felt that to promote such a movement would appear to be disloyal to the London Committee, which had already recommended the establishment of an international Lister Memorial Fund for the advancement of surgery, from which either grants in aid of researches bearing on surgery or awards in recognition of distinguished contributions to surgical science should be made irrespective of nationality. It was resolved to recommend that the Lord Provosts of Edinburgh and Glasgow and the Principals of the Universities of these two cities, who are also members of the London Executive Committee, should be requested to keep prominently before that committee the claims of Scotland for an adequate share of the grants, and that these gentlemen should be entrusted with the administration of any funds in Scotland that may be granted from the memorial. The Edinburgh deputation having retired, the Committee took into consideration the question of the character of the Glasgow memorial. It was resolved to recommend that subscriptions be invited (a) towards the erection in Glasgow of a monument to Lord Lister and to the provision of an endowment for the equipment and maintenance of the proposed Lister Museum in the Royal Infirmary, accommodation for which will be provided in one of the wards in which Lord Lister first put into practice his system of antiseptic surgery, and which ward the managers of the Infirmary have agreed to retain for the purpose; (b) towards the Lister International Memorial Fund promoted by the London Committee. Subscribers will be requested to intimate what proportions of their contributions are to be assigned to the local and to the international funds respectively, but when no such intimation is given the Executive Committee may apportion contributions to either or both funds at its discretion.

Municipal Duty in Regard to Burial Reform.

Dr. Ebenezer Duncan presided at the annual meeting of the Scottish Burial Reform and Cremation Society, Ltd., in the Merchants' House, Glasgow, and moved the adoption of the report. The Society had been in operation over twenty-five years, and now their work divided itself into two branches. In the first place they endeavoured to bring about a reform in the present method of burial, which was not only insanitary, but also unnecessarily expensive, but he had to admit that they had not been able to make any very great change in the habits of the people. The common ground, at least, was overcrowded by the method of pit burial, and this method was objectionable, not only from the point of view of sentiment, but also from the sanitary standpoint. The other branch of the Society's work had been to foster the practice of cremation, which he believed to be the only alternative to a continuance of this system of pit burial in common ground. From this point of view the advance of cremation was to be welcomed, and they were glad to find as a matter of fact all over the civilised world cremation was advancing with rapid strides. It was necessary to force upon the large corporations, such as Glasgow and Edinburgh, that there must be some change in the method of pit burial, because there was no doubt it was a very great source of injury to the public health in the large cities to have these great, crowded cemeteries surrounded by dwelling houses, and the ground, the air, and the water all round about polluted by such masses of decomposing material as they had in these places.

Professor Glaister, in seconding the motion, noted that St. Columba's, the leading Presbyterian Church in London, was open for the reception of urns, and that in Westminster Abbey and St. Paul's Cathedral the ashes of famous men had been placed therein. He was not, however, sure that the religious prejudice in Scotland would be quickly overcome. Steady progress was being made in the education of the people by the persistent work of the Society, and he was of the impression that they were at the turning point. In Glasgow they had annually to dispose of between fifteen and sixteen thousand bodies, and according to the present methods of interment that meant a large amount of ground practically set apart for all time, which was a condition which could not go on indefinitely.

Aberdeen Royal Infirmary Extension.

The Aberdeen Royal Infirmary new out-patients' department was formally opened on Monday afternoon, November 25th. The new premises consist principally of an operating theatre, dispensary, and casualty ward, and are situated on the opposite side of Woolmanhill from the existing main block. The casualty ward has thus been entirely removed from the old portion of the Infirmary, and all out-patients are to be treated in the new building.

Gartloch District Asylum.

In the 15th annual report of this Asylum Dr. Parker states that 258 patients were admitted during the year, a distinct falling off as compared with the previous year, when the maximum number of 307 was attained. From the point of view of recovery, the character of the cases admitted is very poor—only 76 first attacks of less than a year's duration, and 182 over a year's duration, congenital imbeciles, or not first attacks. Of the admissions 28 were congenital defect or epilepsy, 17 general paralysis, 43 dementia paranoia, or chronic delusional insanity. The cases in the Asylum are becoming more and more purely residual, hence the wards are more troublesome than they used to be on account of the large number of noisy, irritating patients. The want most urgently felt is a male-staffed bed ward for tuberculous cases. The present sanatorium for tuberculous cases is not suitable for a male staff on the male side, but is quite suitable for bed-ridden and semi-bed-ridden senile cases, feeble epileptics, and advanced general paralysis. The recovery rate is 33 per cent. This low rate is due to the treatment of incipient and transient forms of insanity in the mental wards of Duke Street Hospital. Boarding suitable unrecovered patients is practised, but leaves a larger proportion than usual of noisy, troublesome patients in the wards. The relative cost of treating these is raised, on account of the larger staff needed. Since the opening of the Hospital in 1898 the percentage mortality from tuberculosis has been about 1.5, and from general paralysis about 2.7. Among the chief causes of insanity in the patients admitted Dr. Parker notes syphilis and alcohol. Syphilis was present in 40 cases, and alcohol was the main determining factor in 54. Of the cases admitted in whom a reliable history was obtained as to the habits of the parents 59.4 had a history of parental abuse of alcohol, while in those patients below 26 years at the first attack of mental disease the percentage of parental alcoholism was 84. With the Wassermann test 21 per cent. of a consecutive series of 75 females, and 35.8 per cent. of 54 consecutive male patients gave positive reactions. The blood serum of 94 general paralytics gave a positive reaction in all save one instance, and in this one the cerebrospinal fluid gave the reaction. The sera of 329 cases of insanity, other than general paralysis, gave 16.4 per cent. of positive reactions. Such figures show how widely spread and damaging syphilis is, and go far to explain the prevalance of general paralysis. The report contains the usual statistical tables, and the Commissioners of Lunacy speak in favourable terms of the management of the institution.

BELFAST.

The Insurance Act.

The question of the payment of members of hospital staffs for attendance on insured patients has excited a good deal of interest in Belfast medical circles. The staffs of the three hospitals which are most interested in the matter, the Royal Victoria, the Mater Infirmorum, and the Forster Green Sanatorium, met to discuss it, and decided that for the present at any rate they would accept no fees, but would continue to act as honorary members of their respective staffs. The Local Medical Committee, however, have reversed this finding, and decided that a charge of at least five shillings per week for ordinary treatment of insured persons should be made:—that is, of course, for persons sent to hospital as insured patients. The two general hospitals have not yet formulated any plan for the treatment of such persons, and many members of the staffs think that such patients should not be accepted. But with the Forster Green Sanatorium the question was an urgent one, as many county authorities were inquiring as to the terms on which patients sent by them could be accepted, and no answer could be given by the Board till the staff decided on their terms. They have now done so, and their terms have been accepted by the Board, and notice is being sent to the various bodies interested. The charge for maintenance in the Sanatorium is 25s. per week, over and above all charges for treatment. The medical charges are fixed as follows till April 15, 1913, after which they are subject to revision:—for ordinary treatment, 5s. per week; for consultation, £1 1s.; for operation, £5 5s.; for consultation with the dental surgeon and extraction if necessary, £1 1s. By ordinary treatment is meant such treatment as patients at present receive, generally two visits a week from a member of the honorary staff. Consultations include visits from the surgeon and laryngeal surgeon, who are members of the staff. For a short formal certificate a charge of 5s. will be made, and for a full report upon a case, 10s. 6d.

Medical men will watch with interest to see how far these terms are accepted by the local authorities. No doubt some of them will think them too high, as their minds have been prejudiced by the report that patients will be treated at certain Irish sanatoriums, at an inclusive charge of one guinea per week. In Belfast the house charge of 25s. per week hardly pays out-of-pocket expenses, and leaves nothing for depreciation of buildings, etc., or for medical treatment. It has been suggested that in a large sanatorium a saving would be effected by dismissing the honorary staff and appointing a whole-time medical officer, but a little examination shows that the saving might not be very much after all. An experienced man, fit to take entire control of such an institution, would be worth at least £500 per year, and this would be equal to a payment of 5s. per week by 38 patients, or say 40 beds, allowing for vacancies. If there were more beds, an assistant would be needed. Further, this allows nothing for consultations with specialists, which would certainly be necessary at times, and would have to be paid for at a higher rate if the specialist was not a member of the staff. If an inclusive fee is fixed which will cover all these contingencies, it is not likely to be much lower in the end than the terms now proposed by the Forster Green Sanatorium.

Eugenics.

A meeting of the Belfast Branch of the Eugenics Education Society was held in the Medical Institute on November 28th, the Bishop of Down presiding. Dr. W. A. Potts, lecturer on Pharmacology in the University of Birmingham, and late medical investigator to the Royal Commission on the Care and Control of the Feeble-minded, delivered a most interesting lecture on "The Feeble-minded." Dr. Potts urged that while drink, ill-health, bad feeding, and insanitary homes might all be contributing causes, the main cause of feeble-mindedness was a mentally defective ancestry, and the only cure was to have the feeble-minded removed from the ordinary world to a place of safety. They should never go to prison or to ordinary charitable homes, but should be placed in custodial homes or farm colonies, where they should be kept, not for an arbitrary period, but till they were able to take care of themselves. He suggested that all should join in bringing pressure to bear upon the Government to take up again the Mental Deficiency Bill. A resolution on the lines of this suggestion was moved by Bishop D'Arcy, seconded by Dr. Calwell, and passed. Professor Lindsay and Professor Gregg Wilson also spoke.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

THERAPEUTIC IMMUNISATION.

To the Editor of The Medical Press and Circular.

Sir, In his inaugural address to the students of the Meath Hospital, published in last week's Medical Press and Circular, Dr. Boxwell said: It is sufficient here to remind you that Pasteur may be said to have *discovered* microbes, and that was less than sixty years ago."

You were so good as to publish a letter I addressed to you on "The late Dr. Smart," in which I confessed my ignorance of the very important discovery he made in the year 1865 of the germs which were the origin of Rinderpest. Dr. Boxwell is not correct in stating that "Pasteur may be said to have discovered microbes." I have before me the "Reports on Rinderpest to the Right Hon. the Lord Provost, Magistrates, and Town Council of the City of Edinburgh," and the lectures delivered by Dr. Smart on "Germs, Dust and Disease." On page 6 of the reports there is a short statement in tabular form, "Description of Germs and Dates of their Discovery."

1. Rinderpest Germ discovered and published on 12 Sept., 1865 (Smart), etc., etc.

And below this is the following: "Pasteur's researches on silkworm diseases began in 1867, but the results of these remarkable investigations were not published until 1870."

In Dr. Smart's Lectures, p. 7, the following is stated: "I found rod-like germs abundantly present in the blood of animals attacked with cattle plague, one of the most intensely infectious diseases that ever visited this country." . . . "So far as I am aware it was the first time that they were shown to exist in the blood of living animals."

If Dr. Boxwell has never read the two works referred to he will feel an interest in doing this, for he must be anxious to be accurate when he is lecturing to his students at the Meath Hospital.

I am, Sir, yours truly,
Robert Lee.

West Drayton, Nov. 30th, 1912.

THE ANTISEPTIC TREATMENT OF PHTHISIS.

To the Editor of The Medical Press and Circular.

Sir,—My attention has been drawn to the valuable correspondence in your paper relating to the Antiseptic Treatment of Phthisis. I wish first of all to state that I am not a medical man, nor do I profess to have any medical knowledge, although as a son of the late Dr. Robert Lee, F.R.S., and having two brothers who are physicians, I have taken an intelligent interest in medical matters from an engineer's point of view, in endeavouring to help the profession in the design and construction of apparatus that I felt might be of interest in the treatment of disease.

It was in this connection that, at the suggestion of my brother, Dr. Robert Lee, I endeavoured to perfect a simple apparatus which would provide a method for the production and inhalation of antiseptic vapour in such form that the medical attendant could absolutely determine, as required, the *definite percentage* of antiseptic to be administered to the patient. There were many difficulties to overcome, but I have now constructed an apparatus which enables the physician to have at his command a method of producing a continuous supply of air, of suitable temperature, impregnated with a definite proportion of antiseptic, and with such force that it can be inhaled by the patient (whether recumbent or otherwise), or propelled into a room.

The apparatus is perfectly simple and requires very little attention to operate. It consists of a boiler to which is fitted (1) a safety valve, (2) a brass dome, having a small orifice in the centre, and (3) a mixing chamber provided with air-inlets, fitted directly over the dome. Fitted to the mixing chamber is a jointed exit tube, which may be set in any position both horizontally or vertically, to convey the medicated air in any required direction. A good adjustable spirit stove or bunsen gas burner is required.

The boiler having been charged with a quantity of water and medicated solution as may be prescribed, and the mixture boiled, a jet of medicated steam is forced under pressure (regulated by the safety valve) into the mixing chamber, where by injective force, this jet of steam draws in a powerful current of air through the air-inlets, simultaneously warming and medicating the air and driving it through the tubes, whence it issues at a temperature suitable for immediate inhalation. The velocity of this current can be raised from 150 to 300 feet per minute, according to requirements.

It of course only needs stating that the principle of the apparatus could be used for supplying entire buildings or sanatoria with air impregnated with antiseptic in quantity.

But of course the essential point from the medical point of view is that (as my brother ascertained in his prolonged investigations of antiseptic vapours) when a mixture of phenol and water is boiled the steam will contain the vapour of phenol in exactly the same percentage as the water with which the phenol is mixed.

All I claim for the apparatus is that it provides an efficient means of producing and distributing phenolised or medicated air with continuity and force for all purposes where antiseptic vapours may be of benefit.

I am, Sir, yours truly,
SYDNEY LEE.

4, Albany Terrace, London, W.
28th November, 1912.

THE HOME RULE BILL.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—What are our Irish Medical Bodies doing? Do they really propose to make no effort to secure compulsory pensions for the Irish Poor Law Medical Service? Many, no doubt, don't think the Bill will pass, but if it does pass they will be called to a stern account. How comes it that everybody else is protecting himself?

I am, Sir, yours truly,
Cashel, WM. THOMAS LAFFAN.
November 25th, 1912.

THE RECENT LAW CASE AND INCOME TAX.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—Many taxpayers who have received the usual blue notices of charge for the current year are, it appears, under the impression that in view of the recent decision in the action Gibson Bowles *v.* the Bank of England, they need not trouble about appealing within the time stated on the notices, reasoning that the income tax laws are in abeyance for the current year, and will remain so until a Finance Act for 1912 shall have been passed. The only safe course is to give notice of appeal against an excessive assessment at once, as, in our opinion, it is certain that the Inland Revenue authorities will continue to act as though a Finance Act for 1912 had already been passed. Any action against the Inland Revenue commenced now would probably not come on for hearing before such an Act will have been passed, and it is certain that when the Act is passed it will be found to contain provisions legalising the assessments already made for the year ending April 5th, 1913.

I am, Sir, yours truly,
E. MONTAGUE,
Secretary, The Income-tax Adjustment Agency.
London, E.C.

OBITUARY.

DR. ROBERT FLETCHER.

BY the recent death of Dr. Robert Fletcher, the medical bibliographer, at the age of 90, a distinguished member of the medical profession has been removed from our midst. A native of Bristol, he received his medical education at the old infirmary in that city and at the London Hospital. He qualified as M.R.C.S.Eng. in 1844, and also became M.D. of the University of Columbia. At the outbreak of the American Civil War he was appointed Surgeon to the 1st Regiment of the Ohio Infantry, and served in the field for two years, retiring with the rank of lieutenant-colonel, and being afterwards promoted to colonel in recognition of his services during the war. Soon afterwards he inaugurated the Army Medical Library at Washington, which has grown to be probably the most important collection of its kind in the world. Dr. Fletcher was associated with Dr. J. S. Billings, the present head of the New York Public Library, in compiling and editing the Index Catalogue of the Library of the Surgeon-General's Office, Washington, U.S.A., and was solely responsible for a number of the volumes. Dr. Fletcher and Dr. Billings were also associated in the compilation of the *Index Medicus*, a monthly journal giving the current medical literature in all languages. After a lapse of several years, this work was revived by the Carnegie Institution of Washington; Dr. Fletcher was chosen editor, and its extraordinary accuracy is mainly due to him. It has been stated that to the last volume every page of the Index Catalogue was read by him in proof. Since 1880, 32 folio volumes have been issued, usually of about 1,000 pages each, including about 10,000 author titles, and representing from 4,000 to 5,000 bound volumes and from 7,000 to 10,000 pamphlets. The second series, now finishing with the letter S, forms the catalogue of a library which last year contained 176,690 bound volumes and 315,414 pamphlets. Dr. Fletcher wrote several papers on anthropology, folk-lore, and on the older English poets and dramatists. He formerly lectured on medical jurisprudence at one of the Washington schools, and afterwards gave an annual course of lectures on the subject at the Johns Hopkins Hospital School at Baltimore. A few years ago he had a serious illness and made a slow recovery, but he generally enjoyed an old age of great mental vigour and was at work almost to the last. In 1910 the Council of the Royal College of Surgeons of England conferred upon Dr. Fletcher the honorary medal of the College for "distinguished labours eminently conducive to the improvement of natural knowledge and the healing art." The medal is rarely conferred, and it may be mentioned that a previous recipient was the late Lord Lister. The presentation of the medal to Dr. Fletcher was made at Washington on behalf of the English College by Mr. Bryce.

MR. G. W. ARMSTRONG, OF BOURNEMOUTH.

WE regret to record the death of Mr. George William Armstrong, M.R.C.S., aged 72, which has taken place at Somerset House, Chine Road, Bournemouth. The deceased, who was well known in naval circles, was the only son of the late Dr. Armstrong, of Queen Anne's Gate, and for a period of nearly 30 years was Resident Medical Officer and Deputy Superintendent at the Royal Hospital Schools at Greenwich, a post with which was associated the medical charge of the officers and residents at the adjoining Royal Naval College. In the absence of his chief, the late Capt. Burney, C.B., through ill-health, it fell to Mr. Armstrong to assume the position of Superintendent for a lengthened period, and the efficiency with which he discharged those duties was recognised by the Admiralty by the grant of a special pension when failing eyesight compelled his withdrawal some twelve years since. Mr. Armstrong's death will be greatly regretted by the large number of naval officers who were brought into contact with him at Greenwich. Amongst these he was a very general favourite by reason of the kindness and geniality of his character, no less than the readiness with which he was always prepared to place at their disposal, at any hour of the day or night, all the resources of his professional skill.

DR. R. H. TRAQUAIR, LL.D., F.R.S., OF COLINTON.

WE regret to announce the death of Dr. Traquair, which took place at Colinton on November 22nd. Although a graduate in medicine, Dr. Traquair never practised his profession but devoted himself to pure science, and attained a European reputation in the domain of palæontology. He was born in 1840, and after his graduation became one of Goodsir's demonstrators. At the suggestion of his chief he studied the asymmetry of the flatfishes, and was awarded a gold medal for his work. During the rest of his life the study of fossil fishes engaged the greater part of his energy. In 1866 he became Professor of Natural History at the Royal Agricultural College, Cirencester; in 1867 Professor of Zoology in the Royal College of Science, Dublin; and in 1873 he was appointed keeper of the natural history collection in the Royal Scottish Museum, Edinburgh, a post which he held until his retirement in 1906. By his work and study in Edinburgh, on morphological structure rather than mere outline of the body or configuration of scales and teeth, ichthyology has been revolutionised, and the classification and nomenclature of Agassiz have been overturned. He published upwards of 130 papers on zoological and palæontological subjects, chiefly fossil fishes, and has left behind him a manuscript catalogue of the fossil fish in the museum. He received many honours: at an early age he was elected a Fellow of the Royal Society, and was awarded numerous medals and prizes by the Royal Societies of London and Edinburgh. He is survived by his widow, a daughter of Dr. William Moss, physician, Dublin, and by two sons and a daughter.

DR. J. WALLS WHITE, OF GLASGOW AND UDDINGSTON.

THE death occurred on Saturday night, November 23rd, with startling suddenness, of Dr. James Walls White, Brunalb, Belleisle Avenue, Uddingston. Dr. White was 73 years of age, and was a native of Orkney, and had been practising in Uddingston for 30 years. He was attending his usual duties on Saturday, even to his surgery at 8 o'clock, and afterwards had reason to call upon a patient, reaching home about 9 o'clock. Shortly afterwards he complained of pain in his left side, and feeling faint was put to bed, but never recovered.

Dr. White took an active and keen interest in the local affairs of the district, and for a number of years was one of the Uddingston representatives on the Parish Council of Bothwell, and also a member of the Park United Free Church, Uddingston. He was for a long time connected with the old established firm of manufacturing chemists, Messrs. J. and I. White, Paterson Street, Kingston, Glasgow. Dr. White leaves a widow, two sons and four daughters to mourn his loss.

MEDICAL NEWS IN BRIEF.

A Play with a National Health Moral.

AN interesting play in support of the crusade against consumption was produced last Wednesday at the Royal Court Theatre conjointly by the Women's Imperial Health Association and the Women's National Health Association of Ireland. The moral of the play is that no one need despair on account of poverty or ill-health, and a battle royal rages between Ignorance, Squalor, Worry-worry, and Purity, Love, Common Sense and Sunshine, the battlefield being a poor Irish cottage. The part of the little Irish girl to whom the good fairies reveal themselves was very cleverly played by Miss Florrie Ryan. The Royal Hospital for Diseases of the Chest, City Road, the City of London Hospital for Diseases of the Chest, Victoria Park, and St. Luke's Hospital for Consumption sent nurses to sell programmes. The theatre was crowded and many interesting people were to be seen, including the Earl and Countess of Aberdeen, who came over from Dublin to see the performance. Others present were Lord and Lady Haddo, Miss Violet Asquith, Lady Duckworth, Lady Critchett, Lady Mackenzie Davidson (who brought a large party), the Hon. Mrs. Dudley Gordon, Viscountess Wolmer, Lady Pirrie, Mrs. Martin Harvey, Mr. Alfred Butt, and Mr. Stuart de la Rue. The prologue was rendered by Miss Irene Vanbrugh, who indicated the keynote of the play—the triumph of knowledge over ignorance and the consequent defeat of the demon of tuberculosis. To many it is not news to hear that sun and air mean life, that intemperance, slothful habits and bad food mean disease, but to know is not always to apprehend. We give our hearty support to the present or any other public-spirited effort to bring home the lessons which are of national importance.

Royal Society of Medicine.

A SERIES of four *conversaziones* was held at the Royal Society of Medicine last week. The President, Sir Francis H. Champneys, received the guests. Among those present were Sir Rickman Godlee (President of the Royal College of Surgeons), Sir Donald MacAlister (President of the General Medical Council), Surgeon-General Sir James Porter, Surgeon-General Sir William L. Gubbins, Sir Arthur M. Branfoot, Sir Henry Morris, Sir St. Clair Thomson, Sir William Whitla, Sir Havelock Charles, Sir William Watson Cheyne, Sir David Ferrier, Sir Shirley Murphy, Sir James Reid, Sir David Semple, Dr. Robert Saundby, Mr. E. Parker Young, Dr. James Little, Dr. William Hunter, and Miss Scharlieb. Of the many exhibits, the most striking, perhaps, was the demonstration by the librarian, Mr. Hewett, on the epidiascope of some of the rare and curious volumes that are in the possession of the Society. Among these was Sir Thomas Browne's "Religio Medici," being a Latin edition of the work published in 1650. A remarkable series of engravings were also thrown upon the screen from Sir Samuel Garth's "The Dispensary," a volume that satirises the opposition of apothecaries to the scheme of establishing outpatients' rooms. Some interesting displays were afforded in the cinematographic films by Messrs. Pathé of various medical and biological subjects, which included pictures of sea life, of the circulation of the blood, of agglutination, of phagocytosis, of the development of sea urchins' eggs, and of the effect of a specific drug on a bacterium. Mr. Deane Butcher, in the Library, gave a demonstration of Professor Leduc's osmotic growths, while in the west lecture hall Messrs. Leitz exhibited various forms of optical apparatus. During each evening a musical programme was given by Mr. Godfrey Holbeck's Orchestra.

Women's National Health Association—Annual Meeting.

THE fifth annual meeting of the Central Dublin Branch of the Women's National Health Association was held last Friday afternoon in the Theatre of the Royal Dublin Society. The Countess of Aberdeen, President of the Association, presided, and recounted the action taken by the Samaritan Committee in regard to the domiciliary treatment of tuberculosis.

Dr. Crowe, medical superintendent of the Collier Dispensary, read his annual report, which stated that 1,176 cases had been dealt with. That worked out at 80 visits per day. The splendid number of 7,555 visits had been paid during the year.

The following resolution was adopted:—

"That the branches of the Women's National Health Association in the City and County of Dublin do request the Lord Mayor of Dublin, and the Chairman of the Dublin County Council to call a meeting to consider the formation of voluntary care committees, representative of all forms of charitable work, to act in conjunction with the official committees under the Dublin County Borough Council, and the Dublin County Council, administering sanatorium benefit and treatment for tuberculosis under the Insurance Act of 1911, and the Tuberculosis Act (Ireland) of 1908."

University College, Dublin.

THE inaugural meeting of the third session of the Medical Society in connection with University College, Dublin, was held last week in the Great Hall of the College, Stephen's Green, Dublin. The President, Dr. Denis J. Coffey, presided. There was a large attendance.

Professor B. Collingwood, M.D., read a paper on "Some recent investigations into the coagulation of blood and their practical application," in which he discussed the result of experiments and researches in various matters of a complex nature relating to blood. Among those who took part in the discussion were Professors Thompson and McWeeney, Sir W. J. Thompson, Drs. Parsons and Farnon.

A Tuberculosis Dispensary for Lambeth.

THE Lambeth Borough Council have adopted a scheme for the establishment of a tuberculosis dispensary at Effra Road, Brixton, and propose to pay the Medical Officer in charge of the institution a salary of £300 a year. The Local Government Board have written to the Council stating that, having regard to the population of the borough and the extent and character of the duties attaching to the post, they doubt whether a salary starting at £300 a year is sufficient to attract medical men possessing the necessary qualifications and experience.

NOTICES TO CORRESPONDENTS, &c.

☛ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

SENIOR STUDENT (Dublin). Should endeavour to obtain a house-surgeoncy at a recognised children's hospital; the fact of his having filled such a post will not only give him the practical knowledge he now seeks, but would be a stepping stone towards the goal of his ambition. One such post offers itself at the present moment at the Hospital for Sick Children in London, which stands at the head of its class. For form of application our correspondent should at once apply to the Secretary, according to the advertisement in another column.

MEDICAL FEES IN BYGONE TIMES.

APROPOS of the fees offered by the Chancellor of the Exchequer to the doctors, it may be stated that at the beginning of the eighteenth century the usual fees to physicians and surgeons in England were "to a graduate in physic, his due is about ten shillings, though he commonly expects or demands twenty. Those that are only licensed physicians, their due is no more than six shillings and eight pence, though they commonly demand ten shillings. A surgeon's fee is twelve pence a mile, be his journey near or far; ten groats to set a bone broke, or out of joint; and for letting blood one shilling; the cutting or amputation of any limb is five pounds; but there is no settled fee for the cure." The system of regulating the fee according to the pocket of the patient is almost as old as history.—*Westminster Gazette.*

DR. BRAND (Driffield).—We regret the delay in publication of your paper on account of great pressure on our space. Proof will be forwarded to you in the course of the present week.

MR. E. B. (Maidstone).—The report in question will shortly be noticed in our columns.

AN INVOLVED PRESCRIPTION.

A LADY staying at an hotel was frightened by a noise like that of a person running about in a room over the one she occupied. The noise went on at intervals for two nights and then changed as if the occupant had gone mad and was jumping about. After making necessary inquiries, the proprietor ascertained that the author of the mystery was a sick foreigner obeying the imperfectly understood directions of an English medical man: "Take the medicine two nights running, then skip a night."—*Everyone's Story Magazine* for December.

DR. T. A. W. (Beds.).—The salicyl-arsenate of mercury, known as enesol, has been found by Frey to possess a rapid action in syphilitic affections of the nervous system appearing to be even superior to salvarsan. It has also been reported by Sabouraud to be of service in psoriasis when injected subcutaneously. The preparation is said not to give rise to general or local symptoms of poisoning.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, DECEMBER 4TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF OPHTHALMOLOGY) (1 Wimpole Street, W.).—8.30 p.m.: Discussion opened by Dr. Leonard Hill, F.R.S., and Professor Starling, F.R.S. Mr. Priestley Smith, Mr. Martin Flack, Mr. Thomson Henderson, Mr. J. H. Parsons, and others will take part.

ROYAL SOCIETY OF ARTS (John Street, Adelphi, W.C.).—8 p.m.: Mr. A. Zimmermann.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan). 3.30 p.m.; Eye Operations (Mr. Brooks). 4.30 p.m.: Lecture: Mr. H. D. Gillies: Tuberculosis of the Larynx.

BROMPTON HOSPITAL FOR CONSUMPTION.—4.30 p.m.: Lecture by Dr. B. Shaw: The Clinical Diagnosis of Occult Pulmonary Tuberculosis by means of Tuberculin.

THURSDAY, DECEMBER 5TH

ROYAL SOCIETY OF MEDICINE (SECTION OF OBSTETRICS AND GYNÆCOLOGY) (1 Wimpole Street W.).—8 p.m.: Specimens by Dr. Handfield-Jones, Dr. Beckwith Whitehouse, Dr. Williamson and Dr. Gordon Luker. Short Communication by Dr. Florence Willey. Paper: Dr. Clifford White: The Contraction Ring as a Cause of Dystocia, with Description of Specimen removed during Labour.

NORTH-EAST LONDON CLINICAL SOCIETY (Prince of Wales's Hospital, Tottenham, N.). 4.15 p.m.: Clinical Meeting.

ROYAL COLLEGE OF SURGEONS OF ENGLAND (Lincoln's Inn Fields, W.C.).—5 p.m.: Mr. C. W. Mansell Moullin. (Bradshaw Lecture.)

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel).

FRIDAY, DECEMBER 6TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF LARYNGOLOGY) (1 Wimpole Street, W.).—4.30 p.m.: Cases, Specimens and Instruments by Mr. C. W. M. Hope, Dr. Walter G. Howarth, Dr. Harold Whale, Dr. P. Watson-Williams, Dr. D. R. Paterson, Mr. J. F. O'Malley, and others.

ROYAL SOCIETY OF MEDICINE (SECTION OF ANÆSTHETICS) (1 Wimpole Street, W.).—8.30 p.m.: Mrs. Dickinson Berry.

MONDAY, DECEMBER 9TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Discussion on "Intestinal Stasis," to be introduced by Mr. W. Abuthnot Lane, followed by Dr. A. C. Jordan, Dr. H. Chapple, Dr. Murray Leslie, Mr. L. E. Creasy, Dr. Distaso. Mr. Barrington Ward, Dr. Schlesinger, Mr. H. Sampson, Mr. J. E. Waugh, Dr. Ofenheim, and Mr. Edred M. Corner.

Appointments.

BEDALE, F. S., M.R.C.S., L.R.C.P., House Surgeon to Special Departments at the Manchester Royal Infirmary.

CLEMINSON, F. J., M.C.Cantab., F.R.C.S.Eng., Clinical Assistant to the Ear and Throat Department at University College Hospital.

DINGLEY, L. A., M.R.C.S., L.R.C.P.Lond., House Surgeon at University College Hospital.

DUGGAN, N., M.B., Ch.B.Vict., Senior House Surgeon at the Manchester Royal Infirmary.

LEWIS, T., M.D.Lond., M.R.C.P.Lond., Assistant Physician to University College Hospital.

MORRIS, C. W., M.R.C.S., L.R.C.P.Lond., Registrar of Anæsthetics at University College Hospital.

Vacancies.

County and City Asylum, Powick, Worcester.—Junior Assistant Medical Officer. Salary £160 per annum, with board furnished apartments, washing, and attendance. Applications to Medical Superintendent.

Carlisle Non-Provident Dispensary.—Resident Medical Officer. Salary £150 per annum with apartments (not board). Applications to the Hon. Secretary, Mr. G. A. Lightfoot, 23 Castle Street, Carlisle.

Clare Hall Sanatorium South Mimms, Barnet.—Assistant Resident Medical Officer. Salary £120 per annum, with board, lodging and laundry. Applications to Ernest F. Collins, Clerk of the Middlesex District Hospital Board, Town Hall, Chiswick.

North Cambridgeshire Hospital, Wisbech.—Resident Medical Officer. Salary £150 per annum, with unfurnished house. Applications to William F. Bray, Secretary.

Herefordshire General Hospital.—House Surgeon. Salary £120 per annum, with board, furnished apartments, and washing. Applications to W. A. W. Price, F.C.I.S., Secretary.

The Hospital for Sick Children, Great Ormond Street, W.C.—House Surgeon. Salary for six months £30, washing allowance £2 10s., and board and residence in the Hospital. Applications to the Secretary.

Births.

CAZENOVE.—On Nov. 28th, at West Norwood Lodge, Knight's Hill, West Norwood, the wife of W. R. Cazenove, M.R.C.S., L.R.C.P., of a daughter.

HINDS.—On Nov. 27th, at 17 Tennyson Road, Worthing, to the wife of Frank Hinds, M.D., a daughter.

HOLMAN.—On Dec. 1st, at "Galeston," Eton Avenue, Hampstead, N.W., the wife of Frank Kay Holman, M.D., M.R.C.S., L.R.C.P., of a daughter.

Marriages.

BURNETT—KENNEDY.—On Nov. 26th, at Bombay, Captain R. F. D. Burnett, 42nd Deoli Regt., eldest son of Surgeon-General W. F. Burnett, to Elinor, eldest daughter of the late T. J. Kennedy, Esq., I.C.S.

FORD—HOILE.—On Nov. 30th, at the Parish Church, Wimbledon, Frank C. Ford, M.B., of Wimbledon, to Elizabeth Stirling Burns, widow of Brigade-Surgeon Lt.-Colonel Edmond Hoile, M.D., and daughter of the late Rev. Joseph Milne, M.A., of Bathgate.

TYRRELL GRAY—WHITELAW.—On Nov. 28th, at Holy Trinity Church, Brompton, Harry Tyrrell, younger son of Richard Gray and of Mrs. Gray, of 38 Harley House, Regent's Park, N.W., formerly of Sao Paulo, Brazil, to Elizabeth Gibson Whitelaw, adopted daughter of Mrs. H. de G. Parker-Jervis, of 73 Egerton Gardens, S.W.

Deaths.

BIRCH.—On Nov. 27th, at London, Lt.-Colonel Edward Alfred Birch, M.D., F.R.C.S., Indian Medical Service, retired.

GREENHOW.—On Nov. 26th, at Esher, Surrey, Surgeon-Colonel Henry Martineau Greenhow, F.R.C.S., late H.M. Bengal Army, in his 84th year.

HOBART.—On Nov. 28th, Edith Guest, wife of N. Henry Hobart, M.B., 33, South Mall, Cork.

MURRAY.—On Nov. 26th, at the Parks, Tenbury, Worcestershire, William Berkeley Murray, M.D., eldest son of the late Hon. William Murray, of Barbados, W.I., aged 70 years.

PLASKITT.—On Dec. 1st, suddenly, Joshua Plaskitt, F.R.C.S., of 25, Chapel Street, Belgrave Square, S.W., aged 78.

SMITH.—On Nov. 26th, at Bramblecot, Kenley, Surrey, William Johnson Smith, F.R.C.S., aged 72 years.

STEDMAN.—On Nov. 25th, at Leighton Buzzard, Frederick Stedman, Surgeon aged 65 years.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, DECEMBER 11, 1912. No. 24.

NOTES AND COMMENTS.

The Last Word. THE problem to be voted upon by the medical profession next week has been narrowed down to a few issues. It must be confessed that the prolonged dispute with Mr. Lloyd George has been productive of the solid, but, as many still think, inadequate additional sum of money voted by the Government, whereby the money grant has been raised to 6s. 6d. The limitation of income of the insured to £2 has not been ceded. The right of dispensing is not granted except in the case of sparsely populated rural districts. Mileage is still a standing grievance, untouched save in the case of a small fringe of country practices. As regards lay control of medical work, that most objectionable element is retained as the ultimate court, but an intervening medical board has been added buffer-wise between the two. If the profession, therefore, comes to terms with the Government under such circumstances it will be as a matter of policy and not because they have gained their cardinal points. It is impossible to forecast the issue, but clearly the terms now defined will be unpalatable to a large number of medical men. On the other hand, many others may think it wise to accept them as a matter of policy. Indeed, various associations have been formed with that express end in view, and in some cases it has been announced that a following of several thousands has been secured.

A Common Interest. ONE of the bodies formed to further the acceptance of the Act under Mr. Lloyd George's latest conditions has gone out of its way to belittle its consultant and specialist brethren. In a recently-issued circular it speaks contemptuously of the consultants who are not concerned in the treatment of insured persons under the Act—that is to say, as paid officials. That seems to be a poor return for the whole-hearted way in which the higher ranks of the profession have fought the common battle. It must indeed be a short memory that has lost its gratitude to Dr. Fred J. Smith for his fine stand against the Council of the British Medical Association, and for carrying through the famous Queen's Hall meeting. That gathering, if not the largest was probably the most important ever held in the history of medicine in the United Kingdom. It brought men together and inspired them with the enthusiasm of a common cause where the machinery of the Association had failed to guide, to govern, or command. Apart from gratitude there is the question of the position of the hospitals under the Act. The only logical way out of the difficulty seems to be the payment of hospital staffs for attendance upon insured persons. Then will come the opportunity for private practitioners to help the consultants and specialists.

The Hospitals —Great and Small. THE voluntary medical charities will have to fight their battle sooner or later over the Insurance Act. In one large hospital it has been ascertained that nearly 50 per cent. of the patients belong to the insurable, and 25 per cent. to the insured class. It is beyond the bounds of reason to expect either the hospitals or the hospital honorary staffs to treat these people for nothing. Then again, employers who are called upon to pay large sums of money under the new Act will naturally cut off their subscriptions; indeed, not a few have already taken that step. One can hardly see how the State is to escape subsidising the hospitals either out of public moneys or as a part of the necessary medical outlay under the Act. To put an end to the hospital system would be to endanger scientific medical progress, and to undermine the foundations of medical education. It is generally understood that a movement is on foot to protect the interests of the larger hospitals. Nothing has been said about the smaller hospitals, which have done, and are doing, a vast amount of scientific work of a high order. Unfortunately, the large metropolitan and provincial funds have, for some reason best known to themselves, always been hostile to the small hospitals. It is to be hoped that the Government, when the hospital question comes up for settlement, will take a broader and more judicial view of the claims of the smaller hospitals, from which no small part of the special knowledge of the general practitioner has been derived.

The Threepenny Doctor. DR. JELLEY, who has attained notoriety as the medical man who gives medicine and advice for the modest, not to say the minute, sum of threepence, seems destined to come into public notice from time to time. It transpired at a recent inquest held at the Hackney Coroner's Court that while on his rounds one day he was called in to a young married woman who was suffering from hæmorrhage following an abortion. According to his own testimony he used two clean handkerchiefs which he was in the habit of carrying about in his pocket to meet various emergencies. The woman died ultimately of general sepsis, and the Deputy Coroner, a medical man (Dr. Guthrie) expressed an opinion that a handkerchief under such circumstances would necessarily be septic. Dr. Jelley combated that view, and maintained that it would come aseptic from the laundry. We fear that any student who advanced such a view at his final examination would be promptly rejected. Dr. Jelley, who does things on a large scale (*i.e.*, apart from the question of fees) said he had attended 12,000 women, presumably during the ten years he had been in practice. At threepence a head that means £125. It is that kind of practice apparently which forms the basis of the actuarial calculations of the friendly societies.

The Rt. Hon. Dr. Cox and the Medical Profession. WE commented in this column a few weeks ago (MEDICAL PRESS AND CIRCULAR, November 13th) on the speech which the Rt. Hon. Dr. Michael Cox had delivered to the last meeting of the Irish Advisory Committee. We read the speech as a repudiation of the policy adopted by the medical profession of Ireland in reference to the Insurance Act and to the friendly societies. The same interpretation was put on it by members of the friendly societies, some of whom hailed Dr. Cox's utterances as the first signs of a cleavage in the ranks of the profession. We learn now that we and they and everyone else have misunderstood Dr. Cox. A correspondence on the subject which has taken place between the honorary secretary of the Dublin Local Medical Committee and Dr. Cox is reproduced below. Dr. Cox is amazed at the misconstruction put upon his words. It appears that his hard words were meant not for his colleagues but for their critics. We are willing to accept all this—the matter is of no importance except to Dr. Cox himself. He, however, makes no attempt to explain away the really important element of his speech—the suggestion that in Ireland dependents of the insured person should be entitled to the medical benefit. This simply means that a medical man in Ireland should attend on a family for the same fee as his colleague in England would receive for one individual.

Drunkenness Off Duty. THE question as to whether employers of labour have the right to exercise any sort of jurisdiction over the private life of their employees has caused much agitation among the railwaymen in the North during the last few days. On Monday night last it was estimated that some 5,000 men were idle upon the North-Eastern Railway system, the origin of the strike being primarily due to the reduction in rank and wages of a driver owing to his conviction for being drunk while he was off duty. The situation is not without great medical interest. No one would condone such an offence for a single moment in any official responsible for the lives of hundreds of human beings had it occurred when he was aboard his engine. The point is whether a man becomes *ipso facto* a worse engine-driver for being guilty of intoxication after hours. An employee is generally supposed to be absolutely free to do what he likes when he is off duty, and he may ruin himself in any way that he chooses provided that he still remains fit for his daily work, though if he be wise he will not voluntarily indulge in any habit that will impair his capacity as a wage-earner. The opinion of many large firms, including that of the North-Eastern Railway Company, appears to be that "drunkenness, even off duty, is an unpardonable offence," these words having once been used by a well-known Board of Trade inspector. It is pretty well established that repeated bouts of intoxication would, by degrees, lead to some impairment of the higher nerve-centres, resulting in a lessened capacity for enduring any position of great physical or mental strain. Hence, the action of the railway company is, at any rate, upon the side of public safety.

LEADING ARTICLES.

MEDICAL BENEFITS AND THE INSURANCE ACT.

IN spite of some further advance in negotiations between the Chancellor of the Exchequer and the British Medical Association, as representing the medical profession of the United Kingdom, the matter of the administration of the medical benefits under the National Insurance Act is by no means settled. This lack of finality, occurring as it does within a month of the coming into operation of the benefits in question, presents an extraordinary and indeed an unprecedented legislative situation. As things stand at the present moment, however, a final decision must be arrived at before Christmas. The chief points urged by the recent deputation upon the Insurance Commissioners were, according to a memorandum issued by the latter body, as follows:—(1) That the duties of practitioners under the Act should be more clearly defined; (2) that the matter of remuneration, night visits and mileage should be given special consideration; (3) that medical men under the Act should be free from lay control. These points have been met partially by small concessions from the Government, and it now remains for the majority of the profession to say whether they are or are not to be accepted. The modifications thus offered may be thus summarised:—(1) In a disputed case a doctor should appeal to local Medical Committee, with final appeal to Court of Referees. (2) Insurance Committees to have power of fining or suspending from medical benefit insured persons who make unreasonable demands upon the doctors. Small special fund for extra payment to doctors where travelling difficulties arise. (3) Medical members of each Insurance Committee to constitute not less than one-tenth of the committee. Before doctor is struck off panel Insurance Commissioners to be advised by a medical committee of inquiry. Slight alteration in composition of sub-committees appointed to hear complaints against doctors. Then, in addition, medical practitioners are permitted to dispense medicines when the patient resides in a rural district more than a mile away from a chemist who is on the panel. With regard to these concessions it may be said at once that some of them are of a meagre and unsatisfactory nature. That which refuses a fair mileage rate for long journeys is tolerably certain to be a source of friction in actual practice. What reasonable excuse can there be for not paying a practitioner for the extra time and outlay involved in long journeys? In what other profession would a flat rate of an analogous kind be tolerated? Mr. Lloyd George may be asked to consider the charges made by a solicitor for visits, say, to a client's house, to another solicitor, to various law courts, and so on—visits that involve varying distances and varying amounts of time—what would the legal profession say to the statutory imposition of a single, fixed, and inadequate fee for all such services? Put in that way the proposition sounds grotesque, yet it does not remotely differ from the attitude of the Chancellor of the Exchequer in his well-meant efforts at vicarious State philanthropy, the brunt of which he has attempted to cast upon the shoulders of an already over-burdened profession. The strength and validity of the criticisms that have been raised against the proposals of the Act are now familiar, and little would be gained by going over the ground again. The latest concessions of Mr. Lloyd George are to be regarded as final. December 31st has been fixed as the latest day on which acceptance of the Insurance Committee's offer can be tendered. There is ample time left under that arrangement for carrying out a referendum to the profession. Meetings have been called for that purpose in all the divisions of the British Medical Association and non-members invited to attend. Votes will be received at the head office in London not later than Wednesday, December 18th, and will be counted on the following day. A special representative meeting of the Association will meet on Saturday the 21st. Whatever the result, the Christmas of 1912 is likely to become famous in the annals of medical history in the United Kingdom. In a crisis like the present it is out of the question to advise strongly upon any definite course to be adopted. It must be left to the individual medical man to vote one way or the other according to his convictions, and after that to abide by the decision of the majority. Failing such union the prospect is of a kind that may well fill the most optimistic medical observer with apprehension. Already various organisations have been formed with the avowed intention of working the Act under the latest conditions independently of the views of the majority of their fellow practitioners. No surer road to disaster could be imagined than that which lies in the direction of divided counsels at the very moment when the final blows are being exchanged and victory turns in the balance. It would be indeed a sad ending to a gallant fight were any considerable number of our men at the last moment to go over to the enemy, nor can such a result be regarded as constituting even a probable contingency.

CURRENT TOPICS.

Hospital Decentralisation.

With the removal of many of the old landmarks and the change in the character of the residential population of central London, it is not surprising that the large hospitals situated in or near this area should move literally with the times. When King's College took the lead in this direction it was felt at the time by those who were sufficiently far-seeing that the example of this great institution would inevitably be followed by others sooner or later. The authorities of Westminster Hospital are now promoting a Bill in Parliament next Session enabling them to sell the present building and site in Broad Sanctuary and to buy or lease another site in the county of London and rebuild the hospital thereon. The necessary powers are also taken for dealing with the Westminster Hospital Medical School, the Westminster Training School and Home for Nurses, and the Incurable Fund. The incurable cases are to be accommodated either at the new hospital, or elsewhere, as may be found expedient. It will, of course, be necessary to repeal in whole or in part the Westminster Hospital Act, 1836. We understand that although a possible site for the new hospital has been considered, no definite decision on this point has yet been reached. The present building was erected in 1834, and was extended in 1886-7, and 1900-1. It claims to be the oldest hospital in London supported by voluntary contributions. Another institution that is shortly contemplating removal is the British Lying-in Hospital, which proposes to amalgamate with the Home for Mothers and Babies, Woolwich, under the combined title of "The British Hospital for Mothers and Babies." The sub-title of the latter institution, "National Training School for District Midwives," will be retained, and the joint hospital will occupy a new building which is shortly to be erected at Woolwich for the purpose. The usefulness of this hospital will be materially increased by following the population to the outskirts of London, where it hopes to assist the Woolwich home in realising the primary object of its existence.

The Bradshaw Lecture on Tumours.

At the annual Bradshaw Lecture, before the Royal College of Surgeons, on Thursday last, Mr. C. W. Mansell Moullin chose for his subject "Tumours," which he described as being of two kinds, those which spring from germ cells and those from somatic cells. The origin of tumours he dated back almost to the beginning of all things, if not actually to that time when life made its first appearance upon earth, at least to a period so immeasurably remote that it is not in the power of our minds to form a conception of its distance. They arose when the Metazoa came into being, when for the first time the daughter cells of some primitive organism, failing to separate from each other after the parent had divided, gained the advantage of combination over their fellows, and founded the new kingdom. There has been no change since. The laws that regulate the development of *Homo sapiens* now are the same as those that regulated the development of the Hydra or its representative then. "Tumours are not inherited," said the lecturer, "though certain families are more prone to the formation of tumours than others. The power of hereditary transmission varies in strength in different families. In some the hereditary power is so strong that they maintain throughout life the full perfection of their development, and growth is never allowed undue licence. In others the power is weaker, and fails to a greater or lesser degree. It is not that the tumours are inherited, but the strength of the driving force that directs development and controls growth." With regard to amputation, it was stated that, though this might free the patient from the consequences, it cannot be regarded as a cure for the growth of tumours. All hopes of finding a cure must rest either upon the discovery of some remedy which can directly kill the tumour cells without endangering the vitality of the normal tissues, or upon stimulating to increased energy the animal tissues that surround the tumour, until they are able to treat those degenerate tumour cells in the same way that the workers treat the drones.

State Aid for Insanity.

A conference was held last week at the Guildhall of representatives of asylums in England and Wales in order to consider the possibility of obtaining State aid for scientific research in mental diseases. As the chairman, Mr. Morgan Thomas, Lord Mayor of Cardiff, remarked, grants are often given by the Local Government Board for research work in the case of other diseases, and there appears to be no reason why this should not also be done in the case of mental disorders. Individual effort, though capable of accomplishing much that is of permanent value, cannot be expected to cope with the large amount of work that calls for scientific investigation upon a more extensive scale up and down the country. In the direction of pathological research into mental disease, Cardiff has always been well to the front, and in one of the institutions under the control of the London County Council many valuable reports, to which we alluded last week, have emanated from its pathological laboratory. Nevertheless, a great need exists for the wider recognition by the State of the claims of the insane in the direction of grants towards research for the prevention, cure and treatment of mental diseases. It is understood that a deputation will be appointed shortly to wait upon the Lunacy Commissioners and the Home Secretary.

The Cleansing of Dublin.

Residents in Dublin were interested to learn last week from full accounts in the daily papers that a new method of street cleansing was on trial, which was expected to banish mud from the city famous for its dirt. The Cleansing Department were in fact trying the effect of hosing the streets. The method is so expensive, however, that it can only be applied to the principal thoroughfares, so that we must not expect any real decrease of the dirt in the back streets. In Dublin street dirt is a very inclusive term—it is not merely the grit of the stone pavements, but also horse droppings, cattle droppings, human sputa and fæces, decaying vegetables, putrid fish and offal of every description. By a curious coincidence, at mid-day on the very day that the Dublin papers were hailing the new departure, the gutter of one of the main thoroughfares of the city—recently re-named in honour of one of the greatest of modern Irishmen—was blocked for some twenty yards by a heap of fish offal lying overnight from the previous day's street market.

The Rounded Corner.

It is always interesting to note the influence of scientific ideas upon the style and character of modern building construction. More light and air space are, as a rule, provided for in all up-to-date dwellings, while heating arrangements and sanitary fittings of even small houses have greatly improved during the last few decades. It is hospital architecture, however, to which one naturally looks to find practical examples of the latest hygienic devices. When the principles of asepsis were once recognised all corners and angles began speedily to disappear from operating theatres and surgical wards, for all such dangerous nooks were felt to be lurking-places of pathogenic germs. The proper cleansing of any room or ward in which these objectionable features have not been removed is almost an impossibility, for ordinary scrubbing-brushes cannot reach the interstices and angles at the junctions of the walls with the ceiling and floor. Even the modern vacuum cleaner fails at this critical point, because some of the dust may have become caked and adherent. Public staircases, especially those to and from railway stations, should always have their corners rounded in order to facilitate cleaning. At one of the Metropolitan Railway stations this was recently done, not for hygienic reasons—alas! as inquiry proved, but in order to prevent fire from the accidental ignition of unused matches getting in between the woodwork. The rounding of the corners between each step would surely serve both purposes.

The Futile First-Aider.

One of the associations of nurses has been tilting against a Red Cross Association on the grounds that the latter sent ambulance sections to the Bulgarian War which included nurses who were not properly qualified as such. The amateur first-aider is often the cause of a great deal of trouble. It would certainly be a good thing if there was always a bystander competent to render efficient first-aid on the occurrence of those accidents and emergencies that so frequently happen. As a matter of fact, there is usually some one present who thinks he fulfils these conditions, and who is often the cause of considerable harm to the sufferer, either by his neglect or his activity—usually the latter. It is very rare to find anybody who has attended a course of first-aid lectures and is willing to leave well alone. If there is a broken leg he, or she, must borrow onlookers' umbrellas and proceed to set it. Angels rush in where even fools would fear to tread, and the net result is increased suffering to the patient and increased work for the surgeon when he eventually rescues the case. Every amateur ambulance worker knows all about the theory of the tourniquet and applies it in season and out of season. If a tourniquet were as harmless as it looks the applicator would be happily conscious of good work well done and no one a penny the worse. Unfortunately for him in most bleeding wounds the injury is to one or other of the superficial veins. A tourniquet is applied with a pressure nicely estimated to leave the arteries free from pressure while venous return is effectually obstructed. A completely ignorant man would probably tie something over the bleeding point and stop the hæmorrhage; the man who has attended lectures exclaims with Bottom "This is Ercles' vein" and proceeds to deal with it with the confidence born of ignorance. The root of all this evil is that the layman, however willing and however skilled at adapting triangular bandages to inaccessible places, has seen very few accidents. Before he is allowed to practise on the streets he should attend the accident department of a hospital and learn rough diagnosis. As it is he has treatment at his finger ends, but requires someone to tell him what the matter is before he can make efficient use of his knowledge. When his diagnostic skill is on a par with his other information he will learn the most important thing of all—when to apply to a case a policy of masterly inactivity.

Creative Art and Sex Emotion.

Chaucer noticed that in the spring "smale foules maken melodie . . . so priketh hem nature in her corages." The male bird sings his sweetest song and puts on his brightest plumage at the time of year when he goes a-courting. He does all this to attract the female, though perhaps he is not conscious of it and thinks that his song is an inevitable expression of the *joie de vivre* that courses through his veins, but seen objectively, it is merely one of Nature's ways of keeping up her idiosyncrasy for preserving the race at all costs. Anyway, the bird sings his song—a creative act of a high artistic order—during the annual period of sexual activity. This period alternates with a longer one during which male and female live together in a practically asexual state and then the sex song is never heard. In the human race sex-feeling exists persistently through the whole period of sexual life, and, like the birds, the human male expresses himself in creating colour and music. A superior creative instinct is as characteristic of the human male being as is the song of the male bird, but as men and women are in the plane of pure intellect often absolutely equal, so we get occasionally a tendency to desexualisation, male showing female tendencies and *vice versa*, and these cases supply us with exceptions to the rule. Still, on the whole, in the spheres of pure art, the male is creative, and the female appreciates the creation. Even where we find the female assuming the function of originator the work has usually a more superficial appeal than that of the male; it may show qualities of grace, dexterity, and a light beauty, but seldom or never does it possess the sense of power and the deep appeal of the best male art. Of course, this is a difference of kind, not of degree. Women have an intenser appreciation of men's art than any man. And the sum total of the whole matter is that Nature wants the race to continue—"so careful of the type she seems, so careless of the single life." All around us and all the time Nature fights for the eternal preservation of her precious germ-plasm.

PERSONAL.

H.M. the King has been graciously pleased to sanction the following promotions in, and appointments to, the Order of the Hospital of St. John of Jerusalem in England:—To be Knight of Grace, Major Arthur William Mayo-Robson, C.V.O., F.R.C.S., R.A.M.C. (T.F.). To be Esquires, William Disbrow Brydone-Jack, Esq., L.R.C.P. and S.Edin., and Thomas Nelson, Esq., M.D. (from Honorary Associates).

Dr. Eugene M. Niall, M.D., has been appointed Honorary Physician to the Westminster General Dispensary.

Mr. J. Everidge, F.R.C.S., has been appointed Sambrooke Surgical Registrar at King's College Hospital.

Dr. Mary Coghill Hawkes has been appointed Superintendent of the Physical Exercise and Massage Department at the Royal Free Hospital.

Mr. R. Beswick, B.Sc., M.R.C.S., L.R.C.P., was admitted last week by the Bishop of Willesden at St. Paul's Cathedral as a parochial reader to St. Botolph, Bishopsgate.

Dr. Harold Kerr has been appointed Medical Officer of Health of Newcastle in succession to Dr. Henry G. Armstrong, who recently retired after forty years' service.

Dr. F. E. Fremantle, Medical Officer of Health for Hertfordshire, has been selected as one of the Unionist candidates for the Parliamentary representation of Stockport.

Capt. H. B. Scott, I.M.S., has been appointed to officiate as Police Surgeon and Pathologist to the Rangoon General Hospital, in place of Captain H. A. Dougan, deceased.

The State Medicine Syndicate of the University of Cambridge have appointed Dr. Humphry, Dr. Myers, and Professor Sims Woodhead to be members of the Managing Committee for the Diploma in Psychological Medicine for three years.

Mr. Washington Epps, M.R.C.S., L.R.C.P., Physician to the London Homœopathic Hospital and a Fellow and former President of the British Homœopathic Society, left estate valued at £36,948 gross, with net personalty £36,644.

At the forthcoming International Congress on Agriculture which is to be held next June at Ghent during the great International Exhibition, Dr. H. B. Newham will represent the London School of Tropical Medicine in the British exhibit at the Exhibition, and Dr. J. W. W. Stephens the Liverpool School. Sir A. M. Branfoot and Dr. Andrew Balfour, of Khartoum, will deal with the plague and Eastern diseases.

A CLINICAL LECTURE
ON
SOME THERAPEUTIC POINTS.

By HERBERT FRENCH, M.A., M.D.Oxon., F.R.C.P.Lond.,

Assistant Physician, Pathologist and Lecturer, Guy's Hospital, London.

(*Concluded from p.* 596.)

Turning now to a totally different condition, I should like to refer to

The Rapid Cure of Pneumothorax by Paracentesis Controlled by X-ray Observation of the Chest during the Operation.

I am speaking particularly of cases in which the pneumothorax is associated with relatively little disease in the lung itself, generally an early stage of apical phthisis. Patients of this kind are not common, but most of us meet with one now and then. It is good practice, as a rule, to leave the air in the pleural cavity for some weeks at least after the onset of the pneumothorax and this for two reasons, namely, first, that by keeping the lung thereby at rest the tuberculous process within it is assisted in its healing—indeed, the rather drastic measure of inducing pneumothorax artificially in the treatment of phthisis that is not advanced is adopted regularly by some authorities; and, secondly, because if one attempted to remove the air from the pleural cavity by paracentesis soon after the onset of the pneumothorax the hole in the lung through which the air originally escaped into the pleural cavity would probably not have healed over sufficiently to prevent its reopening under the strain of paracentesis. In four or five weeks, however, if the pneumothorax persists, instead of the air being spontaneously absorbed, there is a danger that the collapsed and compressed lung will become so fibrosed that it never will re-expand properly if active measures are not taken to cure the pneumothorax. When pus is present at the same time it is generally good practice to treat the condition as one would an ordinary empyema without a pneumothorax, and resect a rib for drainage of the chest. When air is present in the pleural cavity without fluid, however, or with only a small quantity of serous fluid, it is sometimes possible to cure the pneumothorax rapidly by paracentesis assisted by the X-rays. One of the first cases so treated is recorded by Dr. John Fawcett in the Guy's Hospital Reports for 1907, Vol. lxi., p. 49.

One uses the ordinary paracentesis trocar and cannula attached to the vacuum bottles that used to be employed in ordinary paracentesis of fluid. It is important to have two or three of these ready exhausted, and I am strongly in favour of the use of a powerful foot-pump for the purpose, because the smaller hand-pumps are so frequently inefficient. The patient either sits or lies, according to the circumstances of the case, and the exact position of the heart and of the compressed lung is observed by means of the X-rays and the fluorescent screen. The situation and the extent of the pneumothorax show very clearly as a rule. One inserts the trocar and cannula in the ordinary way, watching the contents of the thoracic cavity on the X-ray screen to ensure that the needle is well within the cavity of the pneumothorax and that it does not strike the lung beyond. On now opening the tap of the vacuum bottle the air is drawn out from within the pneumothorax in exactly the same way that fluid is in the case of a hydrothorax, and one can regulate the rate at which it is thus evacuated by varying the degree to which the tap of the exhaust bottle is opened. The patient experiences very little discomfort, though he will presently begin to breathe more rapidly and say that he has a curious sensation, generally not acutely distressing, within his chest. One can see the compressed lung expanding as one watches it on the X-ray screen and the heart can be watched coming back towards its normal position; as the lung is sucked out towards the end of the cannula, the latter is slowly withdrawn and the direction in which its inner end is to point in order to draw out the last of the air can be observed easily on the X-ray screen. If the original hole in the lung through which the pneumothorax occurred has healed over so that air no longer escapes from the lung into the pleural cavity, it is possible in this way to draw off practically the whole of the air that has been in the pneumothorax, to re-expand the compressed lung until it again occupies its right position, and to restore practically to normal, except, of course, for the tuberculous or other disease in the lung itself, that which a quarter of an hour or twenty minutes previously was a serious pneumothorax. No anæsthetic is required. When all the air has been exhausted, the cannula is simply drawn out, and owing to the way that the skin and the subcutaneous parts move upon one another there is no danger at all of fresh air escaping in through the chest wall from outside. It is not even necessary to apply a dressing. The simplicity of the treatment is as striking as is the benefit it gives.

The next point that I shall refer to is perhaps rather a prognostic than a therapeutic point, but seeing that when one is able to measure the significance of a symptom in a given case the treatment that will be adopted is also liable to vary considerably, I may be permitted perhaps to include it here; it concerns

The Value of Estimations of the Urea in the Blood in Cases of Albuminuria.

Probably in the case of no symptom is it more difficult to assess the degree to which it matters than it is in connection with albuminuria. Not only is one familiar with the transient intermittent albuminuria of young men and women who require absolutely no treatment for it at all, but one also knows that there are cases of organic albuminuria in people suffering from chronic nephritis in which the patients survive for fifteen or twenty years after they have refused altogether to observe any particular precautions as regards proteid dietary, medicinal treatment and things of that kind, whilst other patients who have not seemed to be so ill as this have nevertheless died with almost unexpected rapidity. It is exceedingly difficult to be able to pick out by physical signs alone those patients in whom the albuminuria matters, and indicates the need for strict treatment, from those other cases in which, notwithstanding the presence of albuminuria even with renal tube casts and a raised blood pressure, the best treatment is not to insist upon any drastic departure from the ordinary way of living, provided the patient avoids things that are obviously unhealthy.

Again, in the case of elderly men suffering from consecutive nephritis the result of enlargement of the prostate, it is really not at all easy to be sure how good or how bad the kidneys are, and therefore to what extent it is worth while resorting to radical cure by removal of the prostate. There are, of course, many different measures now employed to test the renal efficiency; most of these are based upon the oral administration or the injection into a vein of some substance which is excreted by the kidneys and can be detected in the urine—methylene blue, for instance; but even when one has employed these tests one is very often left in considerable doubt as to whether the excretory powers of the kidneys are adequate or not. It used to be held that estimation of the total urea in the urine afforded a measure of the renal efficiency, but from metabolism work done many years ago now, in conjunction with Dr. J. A. Butler, I am sure that the urea excretion in these cases runs almost parallel with the nitrogen taken by the mouth, and that it is only when the patient is so ill as not to be able to take much proteid food that the total urea in the urine falls markedly below the normal minimum. In patients who look well, but who nevertheless have inadequate kidneys the urea in the urine may reach a very fair total, and one may draw a very erroneous conclusion as to the renal adequacy from the results of urinary urea analysis. There is, indeed, no single criterion of renal adequacy, but I should like to draw attention to a new one, which is likely to be employed fairly widely, and this is the determination of the urea in the patient's circulating blood. In ordinary healthy persons the urea in the blood amounts to something between 10 and 15 parts per 100,000. In cases of serious renal mischief, whether "consecutive," or of the Bright's disease type, or the result of calculous or tuberculous disease, this figure frequently rises to as much as 150 or 200 or 250 parts of urea per 100,000 parts of blood, whilst in rarer instances the figure reaches as much as 500 parts per 100,000. It would be difficult to lay much stress upon a merely small rise above the normal 10 or 15 parts per 100,000, and when one meets with figures such as 20 or 25 parts per 100,000 it does not follow that the kidneys are inadequate. When the figure rises to 75 or 100 parts per 100,000, however, this is a sign of danger, and figures that are higher still are signs of graver omen. Dr. J. H. Ryffel and I have now investigated a large number of patients in respect to this point and the above conclusions are definite. The converse is not necessarily true, for in some cases of puerperal eclampsia, for instance—but not of ordinary uræmia—the urea figure in the blood has been little increased; this supports the view that eclampsia is not due primarily to the inadequacy of renal excretion, but is the result of the formation in the body of abnormal metabolic products, apparently in consequence of pathological changes that take place in the liver as the result of the renal disease. The usefulness of urea estimations in the blood in helping to pick out those cases of cystitis and enlarged prostate that are suitable for operation from those in whom the consecutive renal changes have gone too far is obvious. Some patients with severe pyuria and frequency of micturition may seem to be in too serious a condition for removal of the prostate to be justifiable, and yet, other things being equal, if the urea in the blood is not increased this affords an argument in favour of operation; whilst if the urea is much increased then the clinical evidence afforded against operation by other symptoms and signs is confirmed.

The actual estimations cannot be done by oneself in ordinary practice, but they are relatively simple if the necessary blood is sent to a laboratory where the apparatus required for its analysis is all ready to hand. One takes about 20 cc. of blood from a vein in the arm by means of a hollow needle and an all-glass antitoxic syringe in precisely the same way that one obtains blood for making bacteriological cultivations. One uses the sphygmomanometer bag as a tourniquet in the way that I shall describe later on; when the veins are standing out prominently and the skin over them has been sterilised the sharp antitoxic needle attached to the all-glass syringe is plunged directly into the median basilic or the median cephalic vein; the pressure of the blood itself fills the syringe, and in this respect the all-glass variety has a great advantage over other sorts; all bleeding stops as soon as the pressure round the upper arm is released; the contents of the syringe are expelled into absolute alcohol, about 100 cc. in a suitable glass bottle; the latter is then corked and sent in a protecting tin to the laboratory. The principles of the analysis are as follows: The absolute alcohol precipitates the serum albumin, serum globulin and fibrinogen, but takes into solution the urea together with certain other extracts. The amount of absolute alcohol used need not be measured with absolute accuracy, though it is essential to know the exact quantity of blood. On filtering and washing the filter carefully the filtrate contains the urea; it is evaporated to dryness and the residue redissolved in distilled water. The urea goes into solution; along with it there are minor quantities of other nitrogenous substances no doubt, but for clinical purposes, at any rate, the estimation of the urea by the sodium hydrobromite method, using the original *technique*, gives a sufficiently constant figure when successive samples of the same blood are analysed to warrant one in making use of the results as a numerical measure of what may be called for short the urea in the blood, though probably, just as in the case of the urine, the figure obtained represents the urea plus small quantities of nitrogen from other substances. Dr. Ryffel and I are looking forward to publishing the full results of our investigations in due course, but it will probably take several years before we obtain all the statistics we should like from a long series of cases that have been followed through from the time of the first analysis until the final result of the case is known. We already know, however, that the *technique* is simple, that the patients experience practically no discomfort beyond the initial needle-prick in the performance of the test, and that the figures obtained do afford very material assistance in interpreting the degree to which the symptom—albuminuria—signifies.

The last point that I will mention to you to-night concerns

A Simple Method of Venesection without Incision, by Means of a Short Hollow Needle of Wide Bore; also the Value of the Sphygmomanometer as a Tourniquet.

It may be urged that venesection is so seldom required that it does not need discussion. I think, however, that whereas formerly it was performed to so riotous and unnecessary an extent that it went entirely out of fashion when the reaction against it set in, there are, nevertheless, a considerable number of conditions in which it is not merely a useful but actually an advisable part of the treatment. It is probable that every year each of us meets with several cases in which venesection ought to be performed. To mention one or two such conditions only, venesection is of immediate benefit in cases of acute dilatation or over-distension of the right ventricle from any cause, whether this is due to organic valvular disease of the heart, such as mitral stenosis, or to obstruction in the pulmonary circulation, such as may result from chronic bronchitis and emphysema, or from fibroid lung with or without bronchiectasis; or to renal mischief or arterio-sclerosis with high blood pressure; or to weakness of the heart muscle itself, owing to fibroid changes in it, or to flabbiness from fatty change, or to acute myocardial degeneration from acute rheumatism, pericarditis, or other similar cause. Again, venesection is undoubtedly beneficial in the treatment of acute uræmia, whether this is due to acute or chronic Bright's Disease or to puerperal eclampsia. Lobar pneumonia in vigorous young adults with plethoric tendency, if it is associated with congestion and cyanosis, frequently demands venesection, and the result of the treatment often brings refreshing sleep and relief to the patient's distress. Venesection is beneficial, again, in certain cases of cerebral hæmorrhage; in the relief sometimes of angina pectoris; in the treatment of corresponding abdominal attacks, now generally spoken of as angina abdominalis; it is even probable that small blood-lettings at intervals of a month, six weeks, two months or three months are beneficial to certain full-blooded individuals, especially males who live well without taking a sufficient amount of exercise, and who have a tendency to degeneration of the arteries and kidneys. Similar repeated blood-lettings also prove beneficial to those who suffer from buzzings in the head, attacks of giddiness, and other cerebral symptoms of arteriosclerosis associated with high blood pressure. The reason why venesection has gone so much out of fashion is largely, I think, the fact that we do not like to make incisions for the purpose, such incisions requiring careful aseptic dressing; whereas formerly the mere lancing of a vein was regarded as of no particular moment, since the days of asepsis and antisepsis have come in a skin incision is regarded with greater respect. I find, however, that it is, at any rate in many cases, a far simpler thing to remove blood by vene-*puncture* than it is by vene-*section*, and I have done so now in many cases by means of short, stout, hollow needles, made for me by Messrs. Down Bros. (Fig. 1).

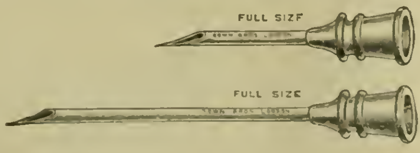

Fig. 1.—The venesection needles, actual size.

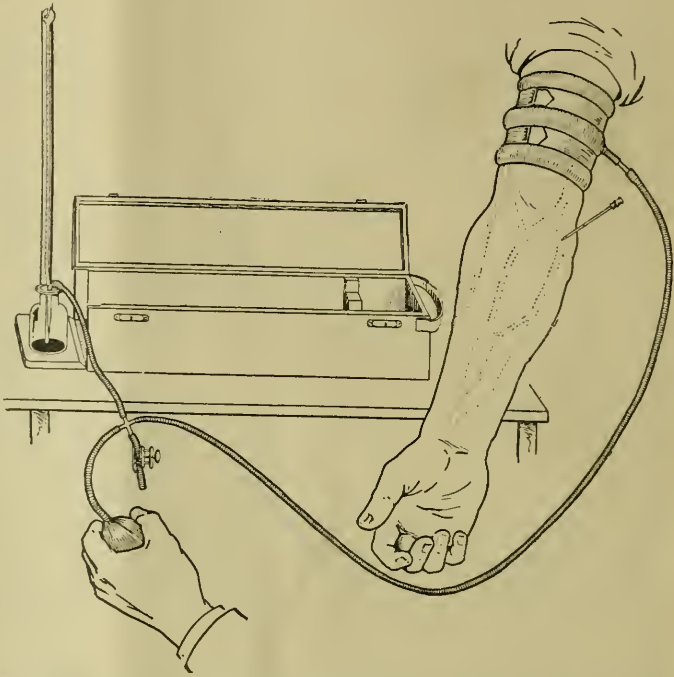

Fig. 2.—To illustrate the use of the sphygmomanometer as a tourniquet, and the mode of venesection by means of a short, stout, hollow needle.

Each is 2 millimeters in diameter, and the most convenient length 2 centimeters; though it is wise to have a longer one of four centimeters also in case one has a very stout arm to deal with. I find, moreover, that the use of the sphygmomanometer which Messrs. Down Bros. make for me greatly facilitates the operation (Fig. 2). The rubber bag being applied round the arm, one pumps the air until one can no longer feel the pulse at the wrist. The point at which the pulse ceases to be palpable gives a measure of the maximum systolic blood pressure indicated by the height of the mercury column in the manometer tube. Suppose this to be, we will say, 125 mm. Hg. one can now let out a little of the air until the pressure in the manometer reaches say, 110 mm. Hg. The pulse can then be felt beating strongly, but the veins are still completely obstructed. Having cleaned the skin over the median cephalic or median basilic vein, according to which is the larger, one now simply plunges the hollow needle directly into the vein, the point being directed downwards towards the hand, and not upwards towards the heart, as is the general rule in taking blood for ordinary blood cultures. The reason for directing the point of the needle downwards towards the hand is that to obtain a large quantity of blood, such as 16 ounces or more, it is better for the blood in the veins to enter directly into the open end of the needle than the reverse way; the point should, therefore, be inserted in the direction opposite to that of the ordinary blood flow in the vein. The advantages of the needle being short and of big bore are: first, that from the shortness of the tube the latter does not become blocked by rapid clotting within it, a trouble which is apt to affect the longer needles of smaller bore that are generally used for obtaining blood cultures; and, secondly, that the rate of outflow of the blood into the receiver is so much more rapid that the venesection can be completed to the extent of 12 or 15 ounces in between five to ten minutes, whereas it takes a much longer time than this for the same amount of blood to flow through needles of smaller bore. As soon as the required amount of blood has poured out from the needle, the air within the sphygmomanometer bag is released; the flow of blood from the veins back into the heart at once reduces the pressure within them to a very low figure, and on withdrawing the venepuncture needle no further bleeding occurs. If a few drops still tend to ooze up from the puncture, these stop at once if the arm is raised above the patient's head. It is as well to apply a little boric acid powder to the spot, but no dressing is required. The only difficulty arises in the case of patients in whom the superficial veins are very small. Upon the whole, however, such patients do not require venesection. It is chiefly when the arteries are relatively empty and the veins too full that venesection is required and in such patients the girth of the median cephalic or median basilic vein is so great that the needles mentioned above enter them with the greatest ease. So simple, indeed, is the letting of blood by venepuncture in this way, with the use of short hollow needles with large bore, associated by the use of the sphygmomanometer band that I am accustomed to let blood in high tension individuals and others of a similar nature in my own consulting room, the patient being so little incommoded that after it he proceeds straight to his business as if nothing had happened.

I think that many of us who might hesitate to perform the operation if cutting through the skin with a scalpel were essential, need no longer hesitate in suitable cases when the hollow needle and the sphygmomanometer are to hand.

NOTE.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by F. C. Purser, M.D., F.R.C.P.I., Assistant Physician, Richmond, Whitworth and Hardwicke Hospitals. Subject: "Bulbar and Pseudo-Bulbar Paralysis."*

ORIGINAL PAPERS.

THE NEUROLOGY OF THE VISUAL SYSTEM.

A Short Series of Original Papers.

By HARRY CAMPBELL, M.D., F.R.C.P.,

Physician to the West End Hospital for Diseases of the Nervous System.

PAPER IV.

THE VISUO-MOTOR SYSTEM.

THE VISUAL MUSCLES.

The muscles of the visual apparatus consist of three sets: the intrinsic, the extrinsic, and the protective muscles of the globe.

The Intrinsic Muscles of the Globe.—The iris and the ciliary muscle. The function of the iris is to regulate the amount of light entering the eye. It consists of two muscles: the irido-constrictor or sphincter pupillæ, and the irido-dilator, or dilator pupillæ. Both are embedded in the posterior portion of the iris. The constrictor is the more developed of the two. It consists of concentrically arranged fibres forming a ring immediately around the margin of the pupil. The dilator consists of radially-disposed fibres passing from the outer border of the iris to the pupillary margin, where they blend with the sphincter.

The function of the ciliary muscle is to regulate the curvature of the lens in such wise that the image of objects fixed at varying distances shall fall neither in front of, nor behind, but exactly upon, the retina.

The Extrinsic Muscles of the Globe.—The recti (superior, inferior, internal, and external), and the obliqui (superior and inferior). Their function is to secure "fixation" of objects looked at, *i.e.*, so to rotate the globes that the prolongation of each visual axis (visual axis-line from macula to a point in the pupil a little to the inner side of, and below, its centre) (a) shall meet at any desired point in the visual field: the point fixed is thus imaged upon each macular region where vision is most acute.

The Protective Muscles of the Globe.—The orbicularis palpebrarum, the levator palpebræ, the frontalis (which assists the levator), and the corrugator supercilii. The function of these muscles is to moisten and cleanse the exposed portion of the globes by rhythmic blinking, and to protect them from violent injury and from too strong light.

THE VISUO-MOTOR NERVOUS SYSTEM.

The visuo-motor nervous system arises in the cortex (figs. 20-21) of either hemisphere from two widely separate regions—an anterior, situated in the frontal region, and a posterior, situated in the neighbourhood of the angular gyrus and the occipital lobe. From this dual origin fibres pass, having first decussated, to supra-nuclear centres situated in the upper part of the brain-stem. Thence a second series of neurons pass to the nerve nuclei, whence the oculo-motor nerves arise.

It will be convenient to consider these various stages of the visuo-motor tract in their inverse order, *i.e.*, from the periphery centrewards. Thus: *a* the nerve supply of the visual muscles, *b* their nuclear centres, *c* their supra-nuclear centres, *d* the cortico-fugal supra-nuclear paths, and *e* the cortical centres.

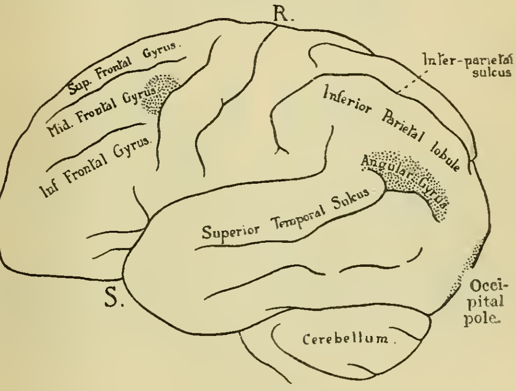

FIG. 20.—R. Fissure of Rolando. S. Fissure of Silvius. The inter-parietal sulcus separates the superior parietal lobe above from the inferior parietal lobe below. The angular gyrus borders the posterior extremity of the superior temporal sulcus. The shading represents areas on the exposed surface of the cerebral hemispheres, stimulation of which produces movements of the globe (and lid)—i.e., the posterior portion of the middle frontal gyrus, the lower part of the inferior parietal lobule, notably the region of the angular gyrus, and the occipital pole. Grasset suggests that in the latter case the stimulus passes to the angular gyrus. It has, however, to be remembered that efferent fibres are known to pass from the peri-calcarine hemiopic cortex to the brain-stem.

a. The Nerve Supply of the Visual Muscles.—The ciliary muscle: third nerve. The irido-constrictor (sphincter iridis): third nerve. The irido-dilator: sympathetic.

Extrinsic muscles: all by the third nerve, except the external rectus and the superior oblique. The former is supplied by the sixth, the latter by the fourth. The levator palpebræ: the third. The unstriped fibres of the levator palpebræ: the sympathetic, which also supplies the orbital muscle of Müller (projector oculi). The orbicularis palpebrarum, the frontalis, and the corrugator supercilii: the oculo-facial (superior division of the seventh).

These nerves arise superficially (fig. 22), as follows :—The third nerves : between the crura cerebri. The fourth nerves : outer side of the crura. The sixth and the seventh pair: the former between the pons and the anterior pyramids, the latter betwen the pons and the olivary bodies. The sympathetic : the first pair of thoracic roots.

(a) In the shortened or lengthened eye it may pass a little outside or inside this. In such cases there may in fact be slight strabismus.

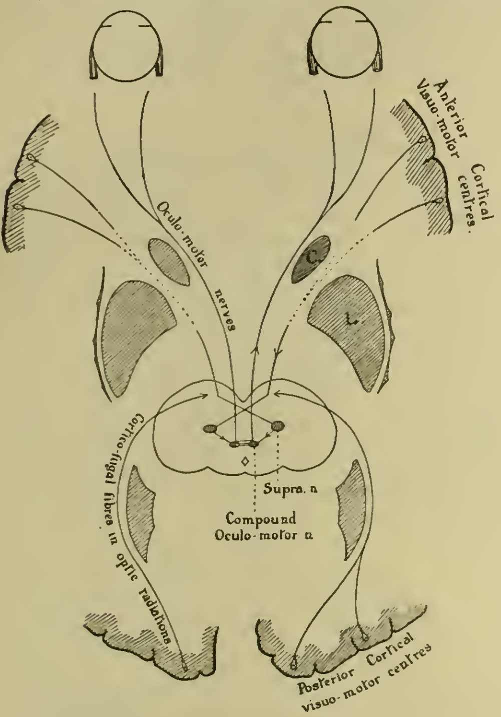
Anterior Visuo-motor Cortical centres.
Oculo-motor nerves
C
L
Cortico-fugal fibres in optic radiations
Supra. n
Compound Oculo-motor n
Posterior visuo-motor Cortical centres

Fig. 21.—Horizontal section through the brain-stem (schematic), showing the visuo-motor tracts.

The third, fourth, and the sixth nerves course forwards and somewhat outwards to the sphenoidal fissure, and are for some distance embedded in dura. Of these the sixth pair run the longest course, and are, therefore, very liable to be involved in disease at the base of the brain, although as a clinical fact they are not so frequently affected as the third pair. The seventh nerve courses forwards and outwards to enter the internal auditory meatus.

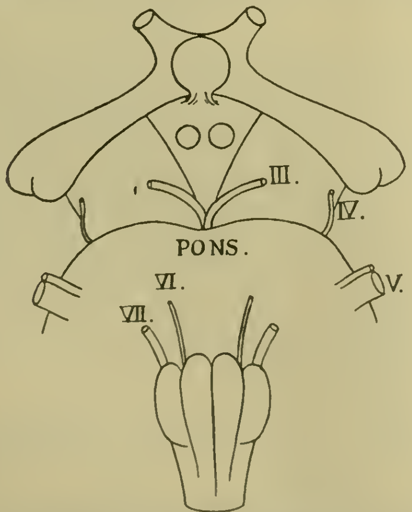

Fig. 22.—Diagram showing the origin of the visuomoter nerves (as well as the fifth nerves) at the base of the brain.

b. The Nuclear Centres.—The nucleus of the sympathetic is situated in the cervical cord. The nuclei of the third, the fourth, and the sixth nerves form pairs on either side of the middle line. (Figs. 23-24-25-26.) Those of the third and the fourth are situated in the floor of the Sylvian Aqueduct, extending along its entire length. The third nerve nuclei lie subadjacent to the superior colliculi and extend into the posterior part of the third ventricle. The fourth nerve nuclei, round in shape and much smaller in size, underlie the upper part of the inferior colliculi.

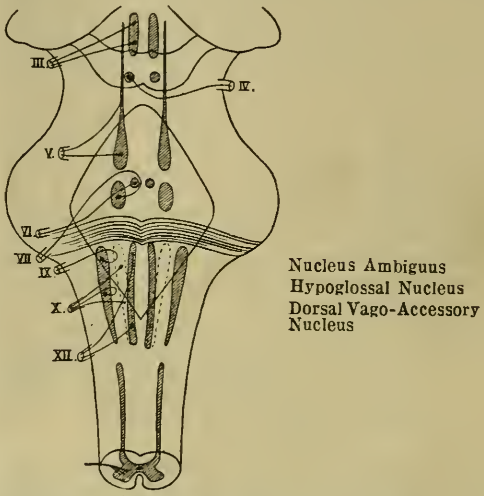

Fig. 23.—Diagram showing the nuclei of the visuomotor (and other) cranial nerves.

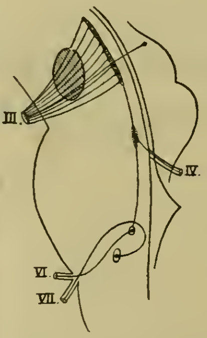

Fig. 24.—Diagram showing the origin of the third, fourth, and sixth nerves. A light-reflex neuron can be seen passing from the supr. corp. quad. to the third nerve. Notice the fourth nerve passing backwards to decussate with its fellow.

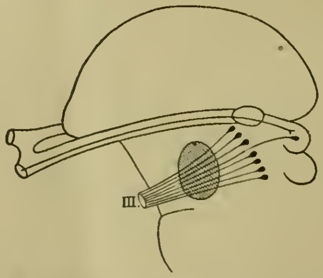

Fig. 25.—This diagram shows a light-reflex fibre traversing the optic tract, and terminating in the superior corpus quad., where it is placed in relation with a neuron, the axon of which passes directly into the third nerve.

The cells of the anterior part of the third nerve nucleus (in the walls of the third ventricle) are smaller than those of the posterior portion. The more mesially situated of these smaller cells are said to supply the ciliary muscle; the more laterally situated, the sphincter pupillæ. The main portion of the nucleus contains larger cells arranged in groups, each of which probably supplies chiefly, or entirely, a particular ocular muscle, but exactly what muscle, or muscles, each group controls is doubtful.

The axons of the third nerve nucleus (some of which decussate and issue with the third nerve of the opposite side) pass forwards and somewhat downwards in numerous bundles through the tegmentum and the red nucleus (Figs. 24—25) emerging from the brain-stem on the inner side of the corresponding crus cerebri (Fig. 22).

The axons of the fourth nerve nucleus—*i.e.*, the fibres of the fourth nerve—have this peculiarity, that they all decussate. The nerve passes for a short distance towards the pons, and then turns sharply dorsalwards, and crosses over the upper part of the superior medullary velum just below the inferior colliculus (figs. 23—24), issuing from the base of the brain on the outer side of the crus (Fig. 22).

The sixth nerve nucleus lies in the floor of the fourth ventricle, at the lower part of the pons, just above the striæ acusticæ. It is immediately subjacent to the emintia teres (some of the fibres arising from a small ventrally situated nucleus). The seventh nerve loops this nucleus in a peculiar way (figs. 23-24-26). The axons pass ventrally and slightly caudalwards through the entire thickness of the pons, emerging from the brain-stem at the junction of the pons and the medulla.

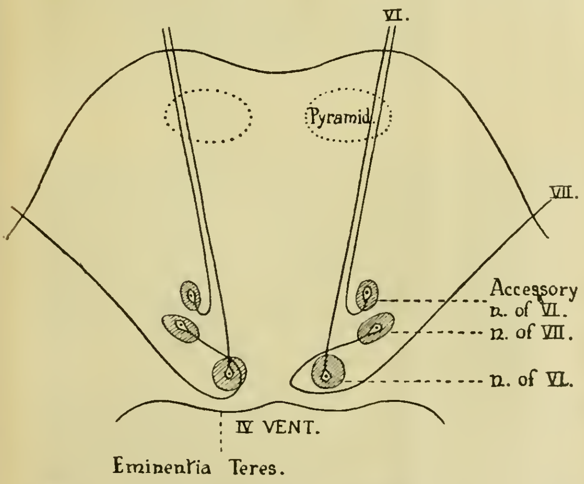

Fig. 26.—Horizontal section through the inferior part of the pons, showing the principal and the accessory muscles of the sixth nerve, and the nucleus of the seventh nerve. The fibres of the sixth nerve on either side are seen passing forward.

Compound Oculo-motor Nucleus.—The nuclei of the third, the fourth, and the sixth pairs of nerves are all intimately connected by means of decussating, commissural, and longitudinal association (*e.g.*, posterior longitudinal bundle) fibres, and thus may be regarded as forming a compound nucleus. This is represented in the accompanying diagram as an elongated parallelogram (Fig. 27). We may further suppose that part of each facial nucleus which supplies the protective muscles of the globes (*i.e.*, the oculo-facial) has peculiarly close connections with this compound nucleus, since there is a close functional association between these protective muscles and those of the globe proper, especially with the levator palpebræ, and we may therefore regard these portions of the facial nuclei as forming part of the "compound oculo-motor nucleus."

Not only are the individual nuclei of this compound nucleus closely connected one with another, but they are intimately associated (largely by means of the dorsal longitudinal bundle) with the remaining cranial nerve-nuclei. The connection with the vestibular nucleus is of special interest, in that it enables the ocular axes to be adjusted in accordance with alterations in the position of the head—*e.g.*, when the eyes are kept fixed upon an object while the head is moved about in varying directions. This association further helps to explain the nystagmus resulting from lesions involving the vestibular nucleus, either directly or indirectly, as in cerebellar disease.

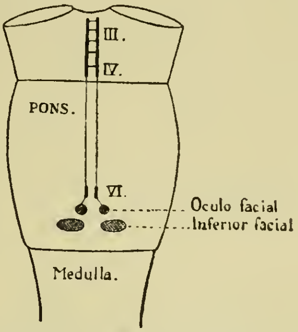

Fig. 27.—Diagram showing the situation of the oculomotor nerve nuclei in the brain-stem. The nuclei of the third, the fourth, and the sixth nerves are arranged in pairs on either side of the middle line. All these are closely connected by commissural and association fibres, and form with the oculo-facial nuclei a compound nucleus, which may be termed the compound oculo-motor nucleus. By the action of higher supranuclear centres on this nucleus, the various conjugate movements of the eye are produced.

c. The Supra-nuclear Centres.—The compound oculo-motor nucleus is controlled by supra-nuclear centres which regulate the conjugate movements of the globes and of the lids. These are probably situated somewhere in the pons, or mid-brain (fig. 28). It is possible that some are located in the superior colliculi (superior corpora quadrigemina). These structures are the analogues of the optic lobes in birds and reptiles. In them they serve as the organs of visual perception, as well as for the visual reflexes involving the muscles (intrinsic and extrinsic) of the globes. In mammals the centres for visual perception are situated within the cerebral hemispheres, and the superior colliculi perform purely reflex functions. Their connections and functions in mammals are, however, by no means exactly known.

Retinal fibres, purely reflex (non-visual) in function, pass to the superficial layers of the superior colliculus. Fibres from the cerebral cortex reach the deeper "stratum opticum" through the optic radiations. On the other hand, no ascending fibres have been traced from the superior colliculus to the cortex. Fibres also reach this structure both from the mesial and the lateral fillet. Those from the latter subserve reflex movements of the eyes in response to auditory simulation. From the deeper strata the tecto-spinal tract arises; the fibres of this tract swing round the central grey matter of the aqueduct, forming by their decussation between the two red nuclei the fountain decussation of Meynart. They then course in the ventral portion of the posterior longitudinal bundle to the cervical portion of the cord, where they enter the ventral horns. Here they are brought into relation with the cervical sympathetic which sends fibres to the irido-dilator.

Fibres pass from the superior colliculus to the compound oculo-motor nucleus, and some directly into the third nerve.

d. The Cortico-fugal Supra-nuclear Fibres.—These fibres course from the visuo-motor centres in the anterior and posterior part of the cortex.

Those which come from the frontal cortex probably pass with the other cortico-fugal fibres pertaining to the motor cranial nerve nuclei, *i.e.*, in the geniculate tract (corona radiata, genu of internal capsule, and inner region of the crusta), although it must be admitted that no geniculate fibres have hitherto been traced into the oculo-motor nuclei. On this view they must travel as far as the pons before decussating, since the two crusta of the crura, unlike the tegmental portion which is united throughout, remain separate until they meet in the pons. Having reached the pons, the fibres would need to take a backward, and many of them, a recurrent course, in order to reach the neighbourhood of the oculo-motor nuclei, where the supranuclear centres are located. An alternate course would be through the undivided tegmentum. (The fibres from the frontal centre of the levator palpebræ are thought by some to pursue a different course.)

The visuo-motor fibres from the posterior cortical region course in the optic radiations towards the brain-stem. Their exact destination is not known. Some of them appear to pass (along with fibres from the auditory cortex) to the lateral part of the crusta. They are possibly conected with the supranuclear visuo-motor centres, or directly with the oculo-motor nerve-nuclei (and other cranial nerve-nuclei). It is possibly through these cortico-fugal fibres that the ocular movements resulting from stimulating the occipital region are produced.

From what has preceded it will be seen that the optic radiations contain *a* afferent visuo-sensory fibres, *b* fibres uniting the occipito-visual cortex of the two hemispheres through the splenium, *c* efferent fibres to the brain-stem. (Fig. 21.) Besides these fibres the radiations contain *d* the fibres of the inferior longitudinal fasciculus, which are thought to unite the occipital and temporal lobes. Of these various sets of fibres those from the corpus callosum (tapetum) are innermost; those of the inferior longitudinal fasciculus are outermost. These two sets are separated by the visuo-sensory fibres, which, however, are contained in all three layers.

e. The Cortical Visuo-motor Centres.—That all the visuo-motor nerves are represented in the cortex cerebri is manifest: in concentrated attention the pupils contract; in terror the pupils dilate, the upper lids are powerfully retracted, while the globes are thrust somewhat forwards (by contraction of the projectores oculi?): the lids can, moreover, be voluntarily opened and closed, and the globes rotated in a variety of directions.

The frontal visuo-motor centres (sensitivo-motor(a))—These are situated somewhat apart from the other motor centres of the Rolandic area, at the base, namely, of the second frontal convolution (Fig. 20.) From this region the eyes are converged, and moved from side to side, upwards and downwards. The protective muscles of the eyes, supplied by the oculo-facial, which is essentially a visuo-motor nerve, are said by some to have their cortical centre in the lower part of the precentral gyrus (Fig. 20.) From this region the lids are raised and depressed.

Grasset terms these frontal visuo-motor centres sensitivo-motor, on the assumption that they may be reflexly excited by stimuli operating through the nerves of general sensibility, *e.g.*, the sensory nerves of the globe, as in the corneal reflex, and of the skin, as when the eyes are directed to a source of irritation (*e.g.*, a fly) on the nose.

The posterior visuo-motor centres (sensorio-motor).—It is probable that the frontal visuo-motor centres, like the neighbouring Rolandic "motor" centres, can be innervated from all the "sensory" regions of the cortex by means of association fibres. Thus in the sudden turning of the eyes in the direction of an object seen, heard or felt (as when *e.g.*, the shoulder is unexpectedly tapped), the frontal visuo-motor centres are ennervated from the sensory areas pertaining to vision, hearing, and touch, respectively.

Special visuo-motor centres appear, however, to exist in the posterior part of the brain. Ferrier long ago showed that in monkeys visuo-motor effects follow upon stimulation of the angular gyrus; the eyes are directed to the opposite side, and this movement is sometimes accompanied by contraction of the pupils and elevation of the opposite lid. A few clinical cases have been recorded of conjugate-deviation of the eyes and ptosis in connection with lesion of this gyrus. These facts suggest that special visuo-motor centres exist in the angular gyrus and its neighbourhood, and it is possible that the ocular movements produced by their stimulation are effected by efferent fibres passing direct to the brain-stem, and not indirectly through the prefrontal centres. These motor effects are analogous to the pricking of the ears which may be obtained in some animals on stimulating the superior temporal convolution. Grasset assumes that these "sensorio-motor" visual centres can be directly stimulated from the retina (*i.e.*, from an organ of special sense), as when the eyes involuntarily follow an object. Similarly in so far as the retinal blink reflex is effected through the cortex it is probably through this sensorio-motor centre.

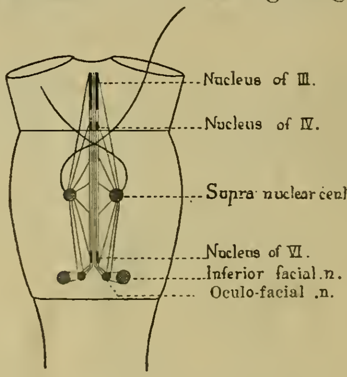

Fig 28.—The three pairs of ocular nerve nuclei III., IV., VI., and the pair of oculo-facial nuclei, all of which supply visual muscles, are represented as forming a compound nucleus. This is acted upon by supra-nuclear centres (of which one only is here represented), capable of so acting upon the compound nucleus as to give rise to the various conjugant movements of the globes and lids. The oculo-facial supplies the frontalis, corrugator supercilii, and orbicularis palpebrarum, all of which are visual muscles.

The position of the cortical centres governing the pupil and the ciliary muscle is not certainly known. There is some evidence that the pupil may be influenced through the angular gyrus and the occipital lobe.

(a) Grasset and other French writers employ the terms *sensitivo* and *sensorio* in relation to general sensibility (sight, hearing, etc.) respectively.

REFLEX STIMULATION OF THE VAGUS CENTRE IN THE TREATMENT OF DISEASE.

By A. T. BRAND, M.D., C.M.,

Physician, Driffield Hospital; Medical Officer, Driffield Workhouse Infirmary.

From time immemorial "counter-irritation" has been employed in the treatment of morbid conditions, by the application of the actual cautery, blisters, etc., to the skin overlying, or in the vicinity of, an inflamed or painful region, with the object of influencing the primary affection by the substitution of another and artificial inflammation; but no satisfactory explanation of the *rationale* of the method has yet been given. Dr. Cameron Gillies has written an exhaustive historical monograph on "Counter-Irritation," from which one gathers that this mode of treatment has no sound scientific basis. Inman says of "counter-irritants": These substances act intensely upon the part to which they are applied; more gently, but yet severely, upon the parts below and around it; and more mildly, yet still decidedly, upon the whole system." This may be accepted as true, but it leaves the problem of the manner in which the alleged influence is brought about still unsolved. It is safe to say that the good result which follows is effected *viâ* the nervous system, and the term "contra-stimulus" of the Italian schools appears to suggest less vaguely the object the physician has in view; but the exact sequence of events still remains to be elucidated. I have been experimenting lately with this method of treatment in several diseases in which the ordinary text-book treatment has proved futile, with results so satisfactory that the following illustrative cases are recorded in the hope that others may also find benefit from its use on similar occasions.

Exophthalmic Goitre.

Last year Kathleen M., æt. 27, unmarried, developed Graves' disease, in which the usual symptoms were present—*e.g.*, tremors, tachycardia, feeling of fulness in the throat, and exophthalmos, these two last being, however, slight in degree. There was no anæmia. The most distressing feature in the case was an intractable nausea, which all the usual remedies, including sinapisms over the epigastrium, were powerless to relieve in the smallest degree. So great was the gastric irritability that even sips of cold water were rejected, and the patient appeared to be rapidly sinking from inanition. Cocaine hydrochloride was given in half-grain doses in the hope of anæsthetising the peripheral distribution of the vagus, but only slight temporary relief was experienced. At last it occurred to me that if the vagus centre in the medulla could be reflexly influenced, a good result might possibly follow. To achieve this end, the skin directly over the course of the par vagum in the neck was irritated by applying linimentum iodi to an area of the size of a shilling, on both sides, immediately behind the angle of the lower jaw. As soon as blistering occurred, the nausea rapidly subsided, and disappeared in a few days, to reappear, though to a less extent, when the blistered parts had healed. Fresh blisters were induced just below the previous ones, when the nausea once more disappeared, and never returned. The patient was now able to take and retain food, and gradually put on flesh. Not only was the nausea entirely removed, but the heart was also beneficially influenced, the pulse-rate falling in a week or two from 120 to 140 per minute to 80, soon afterwards becoming normal. This favourable result was attributed to the afferent stimulation of the vagus centre causing efferent impulses to be conveyed by the par vagum to the stomach and heart.

When the patient could retain food, etc., well, she was given "thyroidectin" (the inspissated blood of a thyroidectomised animal) in 10-grain doses, t.d.s., which was continued for six months, and she is now practically well. How much of the recovery is to be credited to the thyroidectin it is impossible to say, but it is obvious that, unless the nausea had been checked, the patient could not possibly have taken any of it.

Spasmodic Asthma.

Asthma is one of the most unsatisfactory diseases a physician is called upon to treat, and this is evidenced by the fact that the remedies suggested are legion. If, therefore, any means could be found to cope successfully with the malady it should be hailed as a boon, as much by the physician as by the patient.

For the last three years a very refractory case of this disease—Ruth H., æt. 50, married—has been under treatment, which the usual remedies, including a much-vaunted inhalation were unable to affect. Morphia alone had any control over the spasmodic attacks; but cure, not merely relief, was the goal aimed at, and, naturally, the routine use of this insidious drug is greatly to be deprecated. Encouraged by the success attending the reflex stimulation of the vagus centre in the previous case, where the gastro-cardiac distribution of the vagus was favourably influenced, it was deemed reasonable to expect that similar treatment would beneficially influence its distribution to the respiratory system. Blisters were accordingly induced on the skin immediately over the nerve in the neck on both sides as before. The expectation was not disappointed. The result was equally satisfactory, the asthma being decidedly relieved. The spasmodic attacks are now not only very much fewer, but much less severe when they do occur. The attacks used to last for several hours, but now, when one comes on and lin. iodi is painted on the neck over the par vagum until the skin smarts severely, the attack is cut short in half an hour.

Pertussis.

In a case of whooping-cough, Muriel S., æt. 10, the paroxysms were exceeding frequent and violent, and the concomitant vomiting so severe that the patient was rapidly becoming emaciated and exhausted. Appetite was good, but food could not be retained long enough to be digested, far less assimilated. The outlook was gloomy in the extreme, and it was evident that, unless this condition could be relieved, recovery could not be looked for.

Again, the skin was blistered in exactly the same way over the par vagum, with the gratifying result that the paroxysms were at once not only greatly reduced in severity, but the interval between them was so much prolonged that the acts of vomiting became infrequent; food was retained and assimilated, and the child made a rapid recovery.

This treatment has been found to give great relief in affections of the respiratory system, especially where the cough is very frequent and distressing, with scanty expectoration. The frequency is greatly reduced, and the irritability markedly relieved.

Nausea and Vomiting Generally.

Not only in reflex nausea and vomiting does stimulation of the vagus centre, by blistering over the par vagum, exert a benign influence, but also in cases of pathological conditions of the stomach itself, and in my hands it has been found to act much more satisfactorily than sinapisms over the epigastrium, and the other usual remedies.

No opportunity has yet arisen to try this method of treatment in the vomiting of pregnancy, but analogy leads one to expect similar relief in this condition also. It has been found very satisfactory in "sick headache."

There is another form of sickness which is most distressing, as well as exceedingly common, which I have no opportunity of treating by reflex stimulation—viz., "sea-sickness."

It is reasonable to expect that this condition also would be favourably influenced, and I should be very glad if those medical men who "go down to the sea in ships" would take advantage of their ample opportunities to test this method of treatment on the victims of *mal de mer.*

If lin. iodi is objected to on the score of its staining effect, the liq epispasticus or small circular cantharides blisters, etc., might be used, since all equally promote the object in view—blistering of the skin.

[*Note.*—Since writing the above the following communication appeared in the *British Medical Journal* of November 30th, 1912 :—

"Lieut.-Col. C. W. Johnson (Brighton) writes :—Dr. Brand suggests trying vesication of the skin over the course of the vagi nerves for sea-sickness. Exactly twenty years ago I tried it on two officers of the I.M.S. on our way to India, who were prostrated and would not leave their berths. Within half an hour both felt well and were on deck and had no relapse. One of them tried it on his wife, with the same success. I put some chloroform on two bits of lint and put one on each side of the neck (between the mastoid and the angle of the jaw) and covered the lint with silk tissue. The patients kept it on until they could not bear the smarting any longer, I think about 10 or 15 minutes. Ladies with fair skins should be informed that a red mark is apt to be left on their necks for two or three days."]

The subject is a most interesting one, and the result of this treatment has been very gratifying, whatever the exact physiology may be. One cannot but conclude that the vagus centre and its neighbourhood are really influenced, directly or reflexly, by the cutaneous stimulation over the course of the nerve, which lies so near the surface in the neck, with the result that its peripheral distribution, cardio-pneumo-gastric, is powerfully affected, inducing a return to normal conditions of the organs innervated by it. Very severe irritation of the skin of the neck over the course of the nerve, applied to a large area, has been known to accelerate the normal heart-beat, the afferent impulses sent to the medulla causing a diminution in the tone of the cardio-inhibitory centre in the medulla, which normally regulates the cardiac rate. In the case of Graves' disease referred to, the tachycardia was pathological and the cutaneous irritation mild; and here the afferent impulses had the opposite effect—*i.e.*, increasing instead of diminishing the tone of the medullary cardio-inhibitory vagus centre, thus augmenting its controlling influence on the heart and slowing its rate.

Nor is there anything incompatible in the same remedy causing slowing of the heart by increased activity of the inhibitory fibres of the par vagum, and relaxation of bronchial spasm by diminished activity of the motor fibres of the same nerve. Various sets of fibres in the vagus can act quite independently, and can be influenced quite differently by various conditions.

With regard to the gastric influence exerted by the vagus centre in the elimination of nausea, the exact method of its action is a matter for conjecture. The mechanism of the influence of reflex stimulation upon the centres concerned in nausea and vomiting has not, to my knowledge, been experimentally elucidated. It may be that the afferent impulses sent up the par vagum to the medulla so influence these centres that their action is suspended or neutralised.

In the absence of definite knowledge, one must be content to have recourse empirically to this method of treatment of nausea and vomiting by reflex stimulation of the medulla, since it is successful in achieving the end in view.

I have been unable to find any reference in any text-book to such treatment of these morbid conditions, and venture to express the hope that it will be investigated by other physicians, believing that it will not be tried in vain.

CANE VERSUS BEET SUGAR.

By A. STAYT DUTTON, L.R.C.P.LOND., M.R.C.S.ENG.,
Oxford.

It is considered by some dental investigators that caries of the teeth is largely attributable to the use of sugar, and a high percentage of the decayed teeth in children has been said to be caused by eating sweets. Although it is, I think, difficult definitely to ascribe the occurrence of caries in any great proportion of cases to the local action of sugar in the mouth, in the same way that other carbohydrates are harmful, there are data which suggest that the usual food may be to a certain extent lacking in elements required by the teeth. The exact period when the disease began to become much more prevalent than formerly, as it is now generally recognised to be, has not, so far as I am aware, been decided upon. On interrogating persons of 70 to 80 years of age, it is notable they agree that the teeth of those a few years older than themselves and of their contemporaries as children and young adults, were far less affected than the teeth of their own children. Army statistics also show that the teeth of recruits have become decidedly more carious during the last 20 years, and although decay has been known from antiquity, it is likely a marked increase in its incidence, and which has since been progressive, took place between 20 and about 50 years ago.

In investigating the statistics in regard to the relative use of cane and beet sugar, it is found that in 1840, 4.35 per cent. of the world's sugar trade was in that obtained from beetroot; in the year 1870, 30.40 per cent.; and that in 1900 it had increased to 67.61 per cent., mainly owing to its augmented production in various European countries, of which the chief are Germany, Austria-Hungary, and Russia. With respect to the United Kingdom, in 1870, 556,000 tons of raw, with 3,000 tons of refined, cane sugar, and 84,000 tons of raw, with 82,000 tons of refined, beet sugar were imported; and in 1901 the amount was 178,472 tons of raw, with 1,000 tons of refined, cane sugar, and 526,451 tons of raw, with 1,079,553 tons of refined, beet sugar; thus showing that whereas in the year 1870, 559,000 out of 725,000 tons was cane sugar, in 1901 only 179,472 out of 1,785,476 tons was that derived from the sugar cane. In other words, while in 1870, 77 per cent. of the imported sugar was obtained from the latter source, in 1901 this had been reduced to 10 per cent. As to the yearly consumption per head, in 1875 the amount was 50.64 lbs. of raw, with 8.88 lbs. of refined, sugar; and in 1901, 36.80 lbs. of raw, with 56.40 lbs. of refined, sugar (*a*), thus indicating that while the average quantity ingested is greater by nearly

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(*a*) "Encyclopædia Britannica," 1911.

34 lbs., the amount of refined sugar has increased sixfold. These figures show that since the year 1840, a marked alteration has taken place in the world's sugar trade, and in the habits of people in regard to the use of it. It is also noteworthy that the augmented importation and consumption of beet sugar in Great Britain, and in consequence the decrease, particularly since 1870, in that of cane sugar, has been contemporary with a decided increase in the occurrence of dental decay.

Notwithstanding that the chemical composition of cane and beet sugar is said to be identical, that there may yet be differences in it has not escaped the notice of observers, and Dr. Goulston stated in a paper read during the meeting of the British Medical Association at Liverpool last July, that he has elicited from three leaders in the chemical and physiological world that they maintain it was not inherently impossible for the former to contain a factor which is not present in the latter. (a) To one who holds that the predisposing and main cause of caries is due to the ineffective nutrition of the structure of the teeth, and that being constitutional in character it would necessarily occasion detrimental results in other tissues of the body, the question of the nutrimental value of foods and of whether any change in the use or preparation of them is operative in producing such, is of consequence from both points of view. Various matters concerning foodstuffs, among which are the preparation and refining of flour, the milling and polishing of rice, and the use of preservatives, have been recently considered in relation to their effect in the system, and it is possible that a re-investigation may reveal either that cane sugar possesses qualities which are not found in beet sugar, or that the methods now in vogue for the refining of sugar remove substances which are needed for the efficient nutrition of the body.

The amount of sugar that is consumed per head of the population is progressive, and owing to the greater mental and physical energy which is demanded as time goes on, seems likely to continue to be so; that sugar should contain its due nutritional qualities may thus become increasingly needful. The question also induces speculation of a different nature—namely, in regard to the advisability of continuing free trade in commerce—and while the opinions of those who are opposed to it may be correct as to the injury thereby occasioned to the material prosperity of the inhabitants of the country, there is, in addition, the possibility that their physical capacity is adversely affected by arrangements which, in leaving extensive areas in various parts of the Empire that are well suited to the growth of the tropical plant from which cane sugar is derived void of effective culture, have largely delivered the market into the hands of friendly, but foreign, Powers whose source of supply is that which is extractable from beetroot.

OPERATING THEATRES.

ST. BARTHOLOMEW'S HOSPITAL.

Hæmophilia Complicating Appendicectomy.—Mr. D'Arcy Power operated on a boy, æt. 16, an only son born of Jewish parents, who had had a severe attack of appendicitis in South Africa in July, 1912. No details were available, but for some reason it had been thought inadvisable to operate, and the boy was confined to bed when abroad for a month. He came home and appeared to be in average health, except that he was anæmic and had a somewhat earthy complexion.

The operation was done at St. Bartholomew's on a Monday, the patient having been admitted on the previous Friday. The appendix was found to be retro-cæcal, short, and bound down by dense adhesions. It was removed without trouble, and with it a gland from the ileo-cæcal fossa. It was noticed at the time that the hæmorrhage was somewhat more free than usual, and that it did not come from any definite vessel. The operation was performed at 3.30. About two hours afterwards it was noticed that the pulse was failing. The local condition was therefore examined; no dulness was found in the flanks and there was no external bleeding. Tinct. opii 20 m. was administered. His condition did not improve, and at nine o'clock Mr. Power found him pulseless, sweating profusely, and with dilated pupils, restless and quite conscious. Mr. Power had no hesitation in saying that the patient was suffering from concealed hæmorrhage. The boy was at once taken to the theatre and the wound re-opened. A large quantity of fluid blood was washed out of the pelvic cavity. The retro-cæcal area was carefully examined, but no bleeding point could be discovered, and it was therefore packed systematically with sterilised gauze. The patient was very collapsed on returning to the ward, but his condition was improved by intravenous injections of simple saline solution at 120°. He had rallied fairly well by the next day, when the plugging was removed; it was stained with fluid blood, but there was no free escape. On Wednesday morning the boy began to vomit and had hiccough, the abdomen became distended, so that Mr. Power thought he had peritonitis, but his temperature never rose, and his pulse was from 130 to 140. The vomiting was relieved by washing out the stomach, but this relief proved to be only temporary. On Thursday, as his condition had not improved, although he had passed a little flatus, Mr. Power re-opened the abdomen. However, he found no evidence of peritonitis, but that a considerable quantity of fluid blood had again accumulated in the retro-cæcal region. The appendix region was free from any plastic deposit, and the oozing had been quite general and not from any definite bleeding point.

The boy died on the same evening, in spite of every attempt to maintain his blood pressure. No *post-mortem* could be obtained.

Mr. Power said that the occurrence of severe bleeding after an appendix operation was a very unusual thing to happen; it might take place superficially to the peritoneum from the deep epigastric artery or vein when the longitudinal incision had been made through the rectus (called Battle's incision), or it might occur from an imperfectly secured meso-appendix artery. In the present case, however, it had not emanated from any vessel, but there was a general oozing from the whole of the retro-cæcal area, the blood showing no tendency to coagulate, although the boy lived four days after the first operation. The case must therefore be classed as a type of hæmophilic bleeding, and to this the Jewish ancestry of the boy would give some support, as it is known that this disease is somewhat more often recognised in the Semitic races, perhaps, he thought, on account of their early circumcision, when the affection is discovered. The condition is fortunately rare, he pointed out, but must of necessity be the most serious complication occurring in the course of an operation of appendicectomy, which is usually looked upon without much fear. Under the present state of our knowledge this complication must necessarily prove fatal.

The Royal Surgical Aid Society.

At a luncheon recently held at the Cannon Street Hotel to celebrate the jubilee of the Royal Surgical Aid Society, Lord Aberdeen (President of the Society) presiding, it was stated that the Society, which was established at a little shop at Ludgate Hill in 1862, is now the largest to supply all kinds of surgical appliances to the poor, irrespective of creed, and the Committee is appealing for donations to a jubilee celebration fund. During its existence the Society has supplied 750,000 appliances. The first year's income was £240—this year it was £27,469.

(a) *British Medical Journal*, September 21st, 1912, pp. 644.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Section of Ophthalmology.

Meeting held Wednesday, December 4th, 1912.

The President, Sir Anderson Critchett, C.V.O., in the Chair.

The subject for discussion was

THE PHYSIOLOGY OF THE INTRAOCULAR PRESSURE.

Dr. **Leonard Hill**, F.R.S., in opening the debate, said the reason Dr. Black and he appeared before the Society was because some researches which they had been carrying out on the relation of the general circulation to secretion led them to investigate the eye. The subject had already been brought before the Royal Society, but there were some new points which he would speak on. For the purpose of measuring the intraocular pressure, Mr. Thomson Henderson and he made some experiments because with the ordinary hypodermic needle they could not avoid leakage in the track of the needle. The result was, they devised a needle which did not permit of leakage. They found, by very carefully checked experiments, that the aqueous pressure varied within fairly wide limits, depending on the blood pressure: the higher the arterial pressure, the higher was the aqueous pressure. In one case, under chloroform, it was 16 m.m. of mercury, and under ether narcosis, when the animal was in good condition, going up as high as 62 m.m. By a compensation method they obtained readings which seemed to agree, so there seemed but little chance of error. It was very important that the pressure of the aqueous should be positive, because that kept the eye-ball as a perfect optical instrument. Its distension, in their opinion, was maintained by secretory pressure. Though the pressure varied anywhere between 10 and 50 m.m., according to the condition of the circulation, the eyeball retained its shape. The pressure in the capillaries and the pressure of the aqueous must always be the same. In a previous investigation they found that the pressure of the cerebro-spinal fluid and the pressure of the blood in the cerebral veins was the same, and the two varied together. Various workers had made investigations, and it was found by viewing the retinal vessels with the ophthalmoscope that the flow ceased in them when the pressure reached that of the general arterial blood. Dr. Hill and his colleague punctured the cornea of a cat, and then on gently pressing the abdomen the iris on the same side immediately burst into hæmorrhage. All the capillaries allowed the blood to escape, and that came off every time. The explanation was that the normal aqueous pressure was exactly counterbalancing the capillary pressure. The aqueous had a definite chemical nature, and its osmotic pressure was said to be higher than that of the serum. Ehrlich demonstrated, by the injection of fluorescence, that some kind of circulation was proceeding in the aqueous. It seemed, from careful inquiry, that the cribriform ligament was opened up, and thus a passage was made for the fluid into the supra-choroidal space. That transference of fluid would allow accommodation to take place. The suspensory ligament was always taut, exerting elastic traction on the lens and causing it to assume its proper shape. The intraocular tension was said to be due to the elasticity of the lens, but it had no elasticity, for when removed it was a soft, pudding-like body. In the act of accommodation the muscle contracted, but continued to be of the same volume as the uncontracted muscle; on contraction it really moved inwards, as described by Thomson Henderson, and allowed the fluid to pass from in front of the lens either into the spaces of the ciliary body, or into the space of the cribriform ligament and into the suprachoroidal space.

Professor **Starling**, F.R.S., said most would agree with the facts which Dr. Leonard Hill had advanced, but he was not in close agreement with some of the interpretations which the opener placed upon them. It was important to have some idea of the factors determining the formation and absorption of the intraocular fluid, but more important to know what those factors were. It seemed to be generally agreed that the seat of production of the intraocular fluid was the ciliary processes, and the chief absorption was at the anterior angle of the eye, and some probably occurred at the root of the iris. Covering the ciliary processes was a well-marked epithelium, containing columnar or cubical cells, which might well be endowed with the property of secretion, as they were as well formed as those of the salivary gland, or of the kidney tubules. What were the conditions which must be observed if the intraocular fluid was to be regarded as a filtration? The intraocular fluid was at considerable pressure, so there must be resistance against its flow from the eyeball. But if the pressure there was in consequence of the pressure of the blood in the vessels, the pressure of the intraocular fluid must go up with the rise of pressure in the vessels. When the carotid or subclavian artery was obstructed, cutting off the blood supply from the eyeball, the pressure came down; and it went up again in proportion to the amount of blood one allowed to enter those vessels. One could take 25 m.m. as the average intraocular pressure. Stimulation of the sympathetic nerve caused a double effect—first, contraction of the unstriped muscle fibres of the orbit and a rise of pressure, and as the vessels of the ciliary process contracted so as to diminish the blood pressure in these vessels, there was a fall also in the intraocular pressure. There was a quick rise due to contraction of the nictitating membrane and the unstriped muscle fibres, and a rise of pressure. As the formation of intraocular fluid passed off, there was a fall of pressure, accompanied by constriction of the vessels of the eyeball. He contended that the blood pressure must be higher in the vessels all the way along than outside and than the intraocular pressure, and the quicker the rate of flow through the system of vessels concerned the greater must that difference of pressure be. There was no reason for saying it was impossible for a difference of pressure to exist between the capillaries and the fluid outside, but there was every reason for assuming there must be a difference. One could not know how much fluid came out until one ascertained what was the rate of transudation. If the pressure remained constant, that rate was the rate of absorption. Professor Starling showed a number of slides to illustrate his point. It was impossible to measure the pressure in the capillaries under normal conditions. By increasing the pressure of the intraocular fluid one brought up the pressure in the capillaries towards that in the arteries. At some future time it might conceivably be shown that the cells coming from the ciliary processes might act as regulators, but at present there was no evidence that they acted otherwise than as guiding and strengthening the filtering membrane. In regard to the relationship of the capillary to the venous pressure, he had never been able to understand Dr. Leonard Hill's position on that point. Into the mechanism of accommodation he did not propose now to enter, except to say he supposed it to be due to a shifting of fluid between the posterior chamber and the anterior chamber, which could easily take place, as there was no resistance between the fibres and the suspensory ligament.

Mr. **Priestley Smith** (Birmingham) said it was important to know what was the normal pressure in the human eye. It certainly varied in different people and in the same person at different times; but what would be a fair average? A pressure of 60 m.m. which had been mentioned would surely mean that the person had glaucoma. Dr. Hill had said that the intraocular pressure was equal to the venous pressure, and to the pressure in the capillaries. He (Mr. Smith) thought it was equal to the venous pressure at one point—*i.e.*, where the blood left the eye, but that at every other point the intraocular pressure was lower than the blood pressure. Dr. Hill had not shown that the pressure in the torcular herophili was equal to the pressure in the veins and the other parts of the skull; and, as Professor Starling said, there could not be equality of pressure or there would be no movement.

But the difference in pressure was probably only very slight. He did not see how Dr. Hill could hold it as proved that the pressure in the capillaries of the ciliary body was the same as the pressure of the intraocular fluid; and every probability seemed to be against that view. It was generally acknowledged that the intraocular pressure was produced by the ciliary processes, and he believed the ciliary body also played a part. There was no question that the vitreous fluid was removed, but did it come from the posterior surface of the process, or from the *pars plane?* He expressed his objection to the use by some, even chemists, of the term "tension" instead of "pressure." There had been a controversy as to whether the tension of the eye depended on increased volume or to increased pressure of the blood. Such a discussion was futile, because it depended on both.

The discussion was postponed until the next meeting of the section.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Section of Surgery.

Meeting held Friday, November 29th, 1912.

Mr. A. Blayney in the Chair.

RADICAL OPERATION FOR MALIGNANT DISEASE OF THE TESTICLE.

Mr. Seton Pringle read a paper on "Radical Operation for Malignant Disease of the Testis." After dealing with the pathology of new growths in the testicle, he described the lymphatic drainage of the organ and the general anatomy of the region of the operation, illustrating his remarks with lantern slides. He laid stress on the fact that good results could be hoped for only if the operation were undertaken early, before the involvement of the secondary glands. The case which he reported was one of cancer in the left testis of a man aged twenty-eight. The operation was done by the extra-peritoneal route, and in this way the testis, cord, inguinal glands, spermatic vessels right up to the renal vessels, the psoas fascia, lymphatic channels and lumbar glands were all removed in one piece, as was well seen in the specimen which he exhibited. The patient made good progress, and now—six months after the operation—showed no sign of recurrence. The pathological report stated that the growth was a "mixed tumour" of a carcinomatous type, and that although the glands were enlarged, yet they showed no sign of malignant infiltration.

The Chairman congratulated Mr. Pringle on the paper. He said that in the present state of knowledge the only effective treatment in such cases was radical operation.

Mr. Gunn said he had an opportunity of seeing the operation carried out by Mr. Pringle, and it appealed to him as an excellent method of trying to relieve the severe form of disease. He alluded to the danger of recurrence, and said that in three cases in which he had removed the testes for sarcoma he was afraid recurrence had taken place. He considered that there was a difficulty to be faced in making a diagnosis of the nature of the tumour, as to whether it was a simple cystic dermoid or a very malignant form of sarcoma—the latter he was afraid was hopeless. During the operation there was an excellent view of the structures to be dealt with. He inquired if since the operation was performed there had been much alteration of the abdominal wall.

Mr. Pringle, in replying to the remarks, said in speaking of dividing up tumours into two classes—sarcomatous and carcinomatous—for purposes of operation he did not include amongst the sarcomatous mixed tumours in which there were a few sarcoma cells. The abdominal wall since the operation is perfect, and there was no sign of hernia or any trouble of the kind. He pointed out that so far as diagnosis was concerned he advocated the taking out of a small piece for microscopic examination.

A YEAR'S EXPERIENCE OF DIORADIN IN SURGICAL TUBERCULOSIS.

Mr. R. Atkinson Stoney read a paper in which he gave the results of twenty-eight cases of surgical tuberculosis treated by injections of dioradin. He had reported on fourteen of these a year ago, since which nine had received a second course of injections. He divided the cases into two classes, according as to whether they were complicated by sepsis or not. There were fifteen non-septic cases, and of these seven resulted in apparent cure, four were greatly improved and would probably end in cure, two were somewhat improved, one was not improved, and one which improved greatly for a time died later of tubercular meningitis. In the septic cases there were four apparent cures, two were greatly improved, and will probably result finally in cure, one was somewhat improved, and five were not improved, and one which improved died later of acute nephritis. Altogether, there were six cases without apparent improvement. One of these was an advanced septic hip, where it was very doubtful if there had ever been any tubercular trouble, another was advanced cystitis with probable double nephritis; three were cases of very extensive multiple lesions, and one was an early case of epididymitis. The first five of them were all practically hopeless cases, and could not be expected to respond to any treatment, but the case of epididymitis was a distinct failure, as it was discovered early, but progressed steadily and rapidly in spite of injections, and the disease was found at operation to be actively spreading. Having given over 3,000 injections, he could say that he had never seen them do any harm or give rise to any discomfort even if given subcutaneously instead of intramuscularly. The following were the conclusions that might be fairly drawn from these cases:—(1) Dioradin injections are not a certain cure for all cases of tuberculosis; in some cases they will produce a cure more rapidly and more certainly than any other treatment. (2) Early cases of joint disease treated by injections, combined with ordinary methods of rest, good food, etc., will recover more rapidly and more surely than when treated without the injections. The same is probably true of glandular and other surgical affections. (3) In advanced cases with abscess formation, if injections are started before or at the time the abscess is opened, it will usually heal rapidly, and the tubercular process apparently come to an end, and a cure result in a large proportion of cases. (4) Finally, in those cases complicated by septic infection, dioradin injections will certainly reduce the temperature to normal, increase the appetite and weight, and lessen the amount of discharge, and in some cases even bring about a final cure, as in three of the cases reported in the paper.

The Chairman congratulated Mr. Stoney on his impartial and judicial survey of the symptoms presented by the cases, and considered that in the summing up he (Mr. Stoney) had not claimed too much for the method. Dioradin appeared to render considerable assistance in dealing with the disease. There was one objection, however, to its use—*i.e.*, the expense. He thought very few hospitals could afford it.

Dr. Kirkpatrick said that he had but small experience of the method, and that the patients with whom he had tried it were not suffering from surgical tuberculosis, but from phthisis. He was sorry to say that he did not see any improvement which could be attributed to the treatment. Four of the five cases which he had under observation last year came to a fatal termination; the other was a man of advanced age who had an involved tubercular lesion at the base of the right lung, and he improved considerably, and left the hospital expressing himself as quite well, although he (Dr. Kirkpatrick) could not satisfy himself that he was perfectly well. Some of his cases had been seen and examined by Dr. Bernheim, who considered them suitable for dioradin treatment. He had seen a number of other patients who had been treated with the drug and subsequently with injections of iodoform suspended in ether, and it appeared to him that they reacted quite as favourably with the latter as when treated with the radio active substance. He considered that the radium in dioradin was added to it in order to influence the imagination of the patient. It appeared to him that the active substance in the drug was iodoform, and injection of iodoform in certain cases had been followed by good results. He suggested that it would be of interest to proceed with the investigations and try what the results would be from using an ethereal suspension of iodoform in a similar set of patients.

Mr. C. A. BALL inquired if there was only one out-patient treated in the series. This he considered a very important matter, as when surgical cases are taken into hospital a very large proportion of them put on weight.

Mr. GUNN said that he had six cases of tubercular disease under treatment with injections—two of them with dioradin and four with a preparation supplied in Dublin which was much the same. Of the six cases one had done extremely well, and it was treated with the inexpensive drug, one was too recently treated to draw any conclusion, and the remaining four had shown no improvement. All these cases had been treated with tuberculin before this without result, and he would like to know if the tuberculin treatment had any influence on the dioradin treatment. The proportion of failures in connection with the treatment of cases of tuberculosis of the ankle and foot, as compared with any other part, was remarkable. He considered any form of treatment which would have a good effect on cases of lupus was important, as in such cases it could be seen what was actually happening.

Mr. STONEY, in reply, said he had only treated five cases of phthisis with dioradin, and the results were not very satisfactory or definite. One remarkable case in which there were complications was given injections of dioradin, and the patient increased nearly a stone in weight, the sputum was reduced, and the cough relieved. He was not, however, sure how much of the improvement was due to the relief of the complications and how much to the improvement in the lungs. There was only one out-patient treated, and in that case injections were only given every second day. Many of the patients had previously been in hospital for periods from three to fourteen months without improvement.

EDINBURGH MEDICO-CHIRURGICAL SOCIETY.

MEETING HELD WEDNESDAY, DECEMBER 4TH, 1912.

The President, Mr. J. M. COTTERILL, in the Chair.

DR. BYROM BRAMWELL opened a

DISCUSSION ON MALINGERING.

He defined a malingerer as one who feigned sickness or injury or who knowingly and wilfully exaggerated symptoms of illness or injury in order to obtain sympathy or for monetary interest. There could be no such thing as unconscious malingering. Until recently malingering was not so common and was usually seen in the case of soldiers, sailors, prisoners and schoolboys, and was also met with in cases of railway accident. Since the passing of the Workmen's Compensation Act and the Employers' Liability Act, malingering had been much more common. In his book on the spinal cord, Dr. Bramwell had stated that colliers who had suffered from concussion of the spine very rarely suffered from organic disease of the cord or membranes and rarely from the kind of symptoms seen after railway accidents. He had predicted that after the passing of the Compensation Act symptoms following accidents due to falls of coal or stone would be much more frequent. This prediction had been abundantly verified. He now ventured to predict that under the National Insurance Act both malingering and valetudinarianism would become much more common than they were now.

There were several varieties of malingering.

1. Healthy persons might feign or induce disease and claim compensation. This variety was very rare. It was practically limited to club patients, schoolboys and a few hospital birds. It was seen after railway accidents. He recalled the case of an old gentleman who was seated in a train which ran into the buffers. He was thrown gently into the arms of a very buxom lady and his hat was indented—the only injury. However, symptoms developed and got worse and the railway company paid £100.

2. There were cases where after accident or injury the symptoms of previous disease were attributed to the accident. These were more common and much more difficult to deal with. Dr. Bramwell had known cases of congenital club-foot, old facial paralysis, ear discharge, corneal scars, gonorrhœal conjunctivitis, epilepsy, tabes and spastic paraplegia to come into this group. In most cases the patient was aware of the previous condition, but he might not know. The medical man must carefully record the history and ask himself whether the accident was sufficient to account for the symptoms. There was great room for difference of opinion, and this class of case raised the whole question of the relation of trauma to disease. If a man was diseased before he was injured he was not debarred from compensation, but he should not obtain compensation on the same scale as a healthy person.

3. There was the class of case where patients suffering from the effects of accident or injury, or from illness not due to accident or injury, did not recover so rapidly as they might reasonably be expected to do.

In such cases it might pay the patient to be ill or remain ill. In many cases there was no inducement to get well. No effort was made and the symptoms persisted. These were cases of valetudinarianism. The patient had no intention to deceive, but the stimulus of hope was wanting. The chief factor in getting such patients well was to get litigation settled.

Cases of valetudinarianism were of the greatest difficulty and the greatest importance. A special difficulty was where to draw the line between valetudinarianism and partial malingering. In ordinary cares of dyspnœa—bronchial, cardiac or neurasthenic, could the physician say definitely when a patient might safely resume work? In ordinary circumstances family exigencies might lead a man to resume work too soon, but many such cases became valetudinarians.

The diagnosis of valetudinarianism and malingering must be based on careful medical examination and collateral non-medical evidence. Dr. Bramwell said he could simulate epilepsy, angina pectoris or insanity and defy detection, but the malingerer usually overacted his part. There was often, however, sufficient difficulty in distinguishing between organic and functional disease even in non-compensation cases, and great room for difference of opinion. Paralysis of the external rectus, reaction of degeneration, Babinski's sign, ankle clonus, paralysis of sphincters, optic neuritis and changes in the cerebro-spinal fluid were all signs of organic disease, but there were exceptions. Electrical tests were not often very helpful. When a contracted joint relaxed under chloroform that was not necessarily evidence of malingering, but modern methods such as X-ray examination, the perimeter, etc. might give much help.

The collateral non-medical evidence included the existence of unusual symptoms, traps, etc. It was a serious responsibility to certify a patient as a malingerer, and the doctor who certified should be independent of the result.

The procedure advisable in order to detect and prevent malingering under the National Insurance Act would be (a) careful examination by the ordinary medical attendant; (b) in doubtful cases examination and report by a specialist not on the panel and independent of the result; (c) if necessary, prolonged observation in hospital; (d) a time limit for money compensation on cases of neurasthenia and other conditions in which there was no evidence of organic disease.

Dr. GEORGE MACKAY said that the eye was so sensitive an organ that it protected itself from irritation by the malingerer. Before the Compensation Act cases were mainly blinking eye-lids in children or soldiers. Now cases of alleged partial or complete blindness were common. When a patient alleged he could not see and the pupil showed reaction, blindness could not have arisen from direct eye injury. The examiner could then start off with the assurance that the patient was a liar, and quite good sport could be got with a malingerer. There were numerous tests by which binocular vision could be detected. A prism might be placed in front of an alleged blind eye, and the inexperienced malingerer saw two images. Complementary colours and strong curved lenses might be used. There were many cases on the borderland of malingering and hysterical suppression of vision.

Sir Thomas Clouston said that malingering was a normal fact in nature. It was found among the insects and reached a high level among birds in the endeavour to protect themselves or their young. Malingering and valetudinarianism was seen most in neurotic subjects. Melancholia often exaggerated symptoms. They wished to appear more insane than they really were. By nervous suggestion a patient might produce real nervous disease.

Sir George Beatson said that many of the cases of malingering were due to the activities of our legal brethren. He reminded the Society of the old story concerning an injured person who replied to the query whether he was much hurt, "I don't know; I haven't seen my lawyer yet." There should be more stringent rules about the kind of cases allowed to come before the courts.

Dr. J. M. Bowie said that in many cases the lawyer prevented a client from going back to work till his claim had been settled. He said that under the National Insurance Act malingering would entail enormous expense to the State, to employers and beneficiaries. If the beneficiary had to contribute towards the cost of medical advice much valetudinarianism would be checked at the outset.

Mr. Cathcart said that he always made a point of allowing the patient to tell his own story. He had found the condition of muscular development an important help in connection with injuries to joints and limbs. There could not be prolonged loss of power without some atrophy. If a patient's attention was distracted he often performed actions which he alleged were impossible.

Dr. Edwin Bramwell insisted on the distinction between malingering and functional disease. They might, however, be combined, and even combined with organic disease.

Dr. J. V. Paterson said he had had a very large number of compensation cases in connection with the eye. Gross malingerers were rare. The common type was the patient who exaggerated symptoms. The ophthalmic surgeon could, however, comparatively easily make up his mind regarding the facts. He protested against the same type of case being brought repeatedly into the courts.

Dr. Sym remarked on the differences in the value of an eye to different classes of workers and on the difficulty an injured man might have in finding fresh work. One little bit of good might result from the Insurance Act—viz., the recording of the condition of given persons on given dates. Stringent measures should be adopted against the malingerer for gain. It was as much theft to defraud an employer in this way as to pick his pocket.

Dr. Chalmers Watson put forward a plea for cooperation between the patients' medical adviser and the insurance company's medical officer. Permanent damage was sometimes the result of imperfect treatment.

Dr. Dickson said that in colliery practice there was not so much malingering as valetudinarianism. He regretted to find that the *morale* of the Fife miner had been sadly undermined by the Compensation Act. Before the introduction of that Act the average duration off work after a simple fracture below the knee had been three months. Since the Act the average duration had been over six months. He thought the time would increase four-fold under the National Insurance Act. It was no use to try to distinguish neurotic patients. They were all nervous as soon as they were hurt. In the mining villages neurasthenia was discussed at the street corners and traumatic neurasthenia was a common topic of conversation at the pit-head. The opinion of fellow-workman had no deterrent effect on the malingerer or valetudinarian.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Dec. 7th, 1912.

Cancer of the Œsophagus.

Prof. Liebmeister has recently shown by radiography and examination of anatomical specimens that absolute stenosis does not exist in cancer of the œsophagus and of the cardia. No matter to what degree the stenosis exists there remains always a small canal to allow liquids to pass. Real and absolute stenosis occurs only when the canal is blocked by food insufficiently divided or the products of the tumour in a necrotic condition. In these cases M. Liebmeister gives a solution of oxygen water of from 1 to 3 per cent. by tablespoonfuls every hour.

In less than 24 hours the stenosis disappears, and at the end of a few days the patient, who previously could swallow nothing, can take food more or less liquid, and even solids. Several patients thus treated finished not only by eating quite easily, but even took on flesh and returned to an appearance of health. In a case of carcinoma of the cardia the weight increased by 16 lbs., and in another of enormous carcinoma of the stomach the gain was 8 lbs.

A patient was brought to the hospital presenting absolute stenosis of the œsophagus. A few hours after admission, and under the treatment of oxygen water, he was able to take liquids, and two days after thick soup passed, and a week later he could take solid food. In a month he gained 12 lbs. and left the hospital, but continued to use the solution. After a time he left it off for several weeks, when the difficulties returned. He re-entered the hospital, when he was simply put on the same treatment, and a fortnight after he had gained 14 lbs. At the end of some weeks he was admitted to the hospital for the third time, but now he was much wasted; nevertheless, after recommencing the treatment he gained 4 lbs. It is needless to say that all the cases terminated fatally, but life was considerably prolonged and suffering much relieved, facts of no small importance. The method has the advantage of being simple and presents no danger or inconvenience, and is capable of rendering great service in inoperable cancer.

Cacodylate of Soda.

The administration of cacodylate of soda by the mouth or by the rectum is frequently accompanied by divers accidents. Gautier attributes these accidents to the reduction of cacodylic acid in the digestive tract and the setting free of oxide of cacodyle. This last, of a strong garlic odour and very poisonous, determines frequently, even in small doses, a garlic odour of the breath, the fæces and sweat, noticed particularly by those who approach the patient. Other authors have reported symptoms of intolerance, such as cramps in the stomach, dryness of the mouth, loss of strength and appetite, etc. For these reasons, Levrat of Lyon, says the *Monde Médical*, sought to render more practicable the administration, by the hypodermic method, of cacodylate of soda. M. Levrat treated over 1,000 patients suffering from pulmonary tuberculosis during ten years by injections of cacodylate of soda in progressively increasing doses, arriving thus at injecting much stronger doses than usually recommended. In every appropriate case where the caverns were not infected and the extension of the malady not too rapid, he found that the appetite was much increased as well as the weight of the subject, while there was a manifest and general improvement in the strength of the patients. His formula is :—

Hydrchl. of cocaine, 0.05.
Hydrchl. of morphia, 0.10.
Cacodylate of soda, 15 grm.
Sol. phenic acid (5 per cent.), 4 drops.
Water, 100 grm.

This solution can keep for a long time and is completely painless. Each syringe contains 3 gr. of cacodylate, and 6 gr. may be given (adult) at the one time and repeated three times a week, but the dose may be double—that is to say, 12 gr., according to the tolerance of the subject. Dr. Patry gives the full dose (12 gr.) three times a week, and never had any accident. In certain patients the injection has been followed by a slight rise in the temperature, but, as a general rule, fever is a counter-indication to the administration of cadodylate of soda. In these cases methylarsenate of soda or arrhenal should replace the cacodylate. It was asserted that cacodylate provoked albumin, but neither Levrat nor Patry ever observed it.

The results of this method were excellent. Descombiers asserts having assisted at almost miraculous cures by the rapidity with which they were produced in cases of tuberculous glands. A patient had very voluminous glands in the neck; so large were they that the uninitiated took them for goitre. After ten injections of 6 gr. each they all disappeared as by enchantment. In tuberculous patients who present an affection of latent character with bronchitis more or less generalised, this treatment works wonders. The râles disappear, the secretion drys up as if a kindly breeze had swept the mucous membrane; the appetite returns; the dyspnœa ceases. Hæmoptysis is not a counter-indication, the cacodylate rather helps the patient to repair his loss.

Dr. Patry uses a formula which differs from that of Levrat; he leaves out the cocaine and the morphia, and doubles the dose of cacodylate :—

Cacodylate of soda, 30 grm.
Sol. phenic acid (5 per cent.), 4 drops.
Distilled water, 100 grm.

Each syringe (pravaz) contains 6 gr. of cacodylate.

GERMANY.

Berlin, Dec. 7th, 1912.

At the Verein für Innere Medizin and Kinderheilkunde, Hr. Kraus gave an address on

Correlative Disturbances of Development and Growth in their Relations to Tuberculosis.

The question was what anomalies of the body as a whole showed a special tendency to tuberculosis? Also whether there were certain groups of tubercle which might be stigmatised as constitutional? First there were the relations between lymphatism and and tuberculosis. Both pathological anatomy and the records of life insurance companies had already afforded material towards deciding that question. There was still, however, a good deal to be done on the subject, and especially in regard to family disposition. Passing over the scrofulo-tuberculosis of childhood to the lymphatism of the adult, residua of youthful lymphatism were often met with as far as the end of the fourth decade of life. Although it was easy to diagnose lymphatism in the mortuary, it presented great difficulties to the clinicist. A great advance had been made here, however, by means of the use of X-rays. Lymphatism and the habitus asthenicus were frequently mixed up with each other. No doubt the lymphatic formed a special group amongst the tuberculous cases. Moreover, where there was absence of external swelling of glands, Röntgen examination of the chest revealed swelling of the glands of the hilus, and more or less numerous adhesions of pleura. The tuberculin reaction of these cases was generally positive. In such cases the tuberculosis was rarely progressive. But in later years tubercle was frequently found—of the eye; the urogenital apparatus, or the suprarenal capsule. Most probably a juvenile pulmonary tuberculosis lay at the bottom of these cases, which had attacked the glands of the hilus secondarily. A second form of tuberculosis was often met with at the end of the first or second decennium, which, on the contrary, proceeded from the glands of the hilus and passed thence to the lungs. In these individuals all the tuberculin reactions were positive. In the third group the tubercle was not localised, but generalised in the whole of the lymphatic apparatus. They were the forms of the nodular, tumour-like tuberculous lymphomatosis. The glands had no tendency to break down. Microscopically one found numerous tubercles, here and there granulomatous tissue. The tuberculin reaction was always positive. A comparative amount of lymphocytosis or polynucleosis was found in the blood. The fourth group was that of generalised lymphogranulomatosis, the form described by Sternberg, and which, according to him, should be a form of tuberculosis.

Histological tuberculous changes were not met with in these forms of disease. But in spite of this the disease was most probably of tuberculous origin. The cases had increased in numbers the last few years, in which in part, through experiment on animals, tuberculosis was demonstrated, and, in part, in antiformin sediments, the granular virus of Much. These cases did not give tuberculin reaction, but a weak Wassermann one, and in one case in the second medical klinik the complement combination with tuberculin was positive.

Passing to the habitus asthenicus, he pointed out that the phthisical thorax was by no means a long one, but that the lumbar spine was of abnormal length. Lenhoff's index had done him good service in taking the measurements. Everything pointed to the fact that the habitus phthisicus was present before the tuberculosis. The ""tropfen" heart was a part symptom of the habitus asthenicus, but whether it had any relation to tuberculosis had not been cleared up.

AUSTRIA.

Vienna, Dec. 7th, 1912.

Cancer.

At the Gesellschaft der Aerzte, Kraus citicised Freund's results which he recorded at a former meeting with reference to the cell reaction in carcinoma. His own research in this direction was that very few gave the same reaction where cancer was not far advanced, and in epithelium carcinoma it was absent. He agreed, however, with Graff that the gravid female in the tenth month had an analogous cell reaction to the serum of the carcinomatous patient. In following this argument we have to accept the Ishiwara and Winternitz results that the embryonic cell was analogous to the carcinomatous cell as the relation of the blood serum in the gravid is in direct connection with the advanced fœtus. Whether this exchange of the serum between the mother and child is the direct cause of this cell property has not yet been proved. Carcinomatous serum gives various reactions, as Ishiwara has frequently demonstrated in the laboratory. The sera in the first day after the implantation showed normal conditions in the animal, which continued 15 to 20 days, although the tumour had reached the size of a hazel nut, and not before the 30th day was the serum reaction positive.

Non-operative Cancer.

At the medical and scientific meeting, Prof. Czerny opened the proceedings with a lecture on the treatment of cancer without calling in the aid of surgery. He said he knew of no specific, although every year produced a number of these wonderful drugs. Every discoverer found his remedy infallible, but time only proved it to be worthless. There were, however, some drugs put before us which did improve the patient, and ought to be considered; even though they did not cure they might bring about a pause in the progress of the disease. This was an important subject, as 50,000 every year in Germany died from cancer, while it is estimated that 100,000 cancerous patients moved amongst us. As no specific drug can be put forward, the operative treatment is still recognised, although the so-called toxin and immune therapy have been applied with a certain amount of success. In recent times chemo-therapy has gained some favour from the successful experiments on animals. It has long been recognised that carcinoma and sarcoma are spread in the body by means of circulation, and might be attacked through the stomach and bowel by some chemical process. Professors Neuburg and Kaspari have attempted this with what they term "tumoraffinensubstanz." Professors Wassermann and Kaysser have recently experimented on tumours in mice with a combination of seleneosin by injecting it as near the site of disease as possible, so that the metallic salt may be absorbed by the diseased cells, and thus act on the nucleo-globulin. The morbid tissue becomes engorged with blood, the pathological cells break down, and healing of the part rapidly takes place. The danger of this treatment is that the poisonous dose lies so near the healing dose that it has been dangerous to try it on the human body. Neuburg and Kaspari have been working in the same direction with a combination of copper and tin, while Tauber and Gers have been using a colloidal combination with favourable results. Linden and Strass have also obtained good results with copper and lecithin in cancer as well as tuberculosis. Werner has met with considerable success with a combination of cholin salts. The old arsenic remedy has been revived by Ehrlich Hata in his salvarsan treatment under neo-salvarsan, which certainly improves the condition, but little more can be said of it. The Röntgen therapy may be shortly disposed of by saying it is very doubtful in its results.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

EDINBURGH.

Medical and Dental Defence Union.

At the completion of the 10th year of its existence the Scottish Medical Defence Union is in a strong financial position. In May, 1903, its reserve fund was only £135, or 5s. 9d. per member; this year it stands at £2,535, or £2 1s. 8d. per member. This is a considerably higher figure than that of other similar associations and justifies a complete sense of security against all possible contingencies. The membership now stands at 1,215, and there is a balance on the year's working of £311. The outstanding feature of the year's working has been the exceptionally large number of claims made against members, only a few of which, however, resulted in litigation. The Council continues the policy it has always adopted: If, after consideration of the facts, the position of the member is deemed to be sound, an uncompromising attitude is taken up, and the knowledge that the Union will not pay money to settle troublesome claims and save litigation has in many cases deterred agents from taking further proceedings. Notwithstanding this, lawsuits have been numerous and have occurred in connection with every department of professional work. Practitioners holding public appointments have been subjected to an extraordinary amount of vexatious litigation—cases having arisen out of asylum work, hospital work, public works appointments, friendly society appointments, parish work and others. The Council report that no case presented to them for defence has been refused, and all defended have been successful. The Indemnity Insurance scheme has been extensively taken advantage of by members, as also has the right of applying to the Council or its solicitor for advice on matters of professional difficulty. Altogether, the Union has completed a most satisfactory year's work and is in a most flourishing condition.

GLASGOW.

Installation of the Lord Rector.

On Wednesday night, December 4th, the undergrads of Gilmorehill had an opportunity of expending some of the superfluous boisterousness which is apparently a characteristic of their composition. Of course, there had to be an excuse of some sort for the display, and as a rule that is not hard to furnish when the Gilmorehill youths desire to have a night out. The excuse on this occasion was the arrival in the city of their Lord Rector, the Right Hon. Augustine Birrell, M.P., for his installation on the following day, and in accordance with custom the distinguished visitor was escorted to the University by a torchlight procession, which had all the picturesqueness of a fancy-dress parade—a department in which the student shines to advantage. And the Undergrads turned out in force. After the self-elected guard of honour, flourishing their torches, had seen their Lord Rector safely housed in Principal MacAlister's residence at the University the fun commenced, the students devoting the remainder of the night to the task of enlivening the principal streets of the city, but good humour was all-prevailing, and many comical sights were seen. The next day (Thursday) in St. Andrew's Hall the time-honoured custom was observed when the occasion was the address by the Lord Rector. There was a large attendance of students and of the general public, who were admitted by card. The presence in the audience of the red academic gown lent a pleasant sartorial touch to the assembly, and during the interval of waiting for the proceedings to commence there was the singing of the students' choruses and the shouting of student tags, which kept the singers themselves and the public in the best of humour, and the threat of Suffragette interruption lent an added touch of interest to the gathering.

The first business was the conferring upon the Lord Rector of the honorary degree of LL.D. by Principal Sir Donald MacAlister, who presided. Mr. Birrell signed the oath of office and was invested with the robes of office and installed as Lord Rector.

On rising to address his audience, the Lord Rector was hailed with "He's a jolly good fellow," and on continuing his address had not uttered many words when a lady in the side gallery of the platform rose and shouted, "You have not given votes to women." She was immediately bustled out by the vigilant and vigorous stewards. This was followed by several further interruptions with similar expulsions.

The Lord Rector then made a fresh effort with his address on "Thoughts and Deeds." Scarcely, however, had he got beyond the explanatory stage when another lady's voice was heard in the balcony, and on this interruption the Principal intervened, with better results for a time.

Mr. Birrell next made reference to the question of the popular election, incidentally thanking the students for doing him the honour of electing him their Lord Rector.

"What do we mean when we own to the fascination of great events?" was the query which the Lord Rector next set himself to answer. In characteristic manner he answered the question. His address, as usual, was mainly of an academic character, but it was lightened by many felicitous phrases worthy of the author of "Obiter Dicta."

If he were once again young, continued the Lord Rector, he would not depend upon his reading upon any traditional period, or upon any particular crisis, but try to be content to lead the life of his own time, sharing to the full its thoughts and speculations, without recklessness or levity; not, as were the mediævalists, intimidated with the fear of death, yet with a Johnsonian gravity befitting its ever-nearing approach. He appealed to them to think seriously, for the times we lived in were serious. It was the minds of men, and not blind fate, that wove the destiny of the human race.

Mr. Ian D. Grant, president of the Student's Union, proposed a vote of thanks, and asked the Lord Rector to ask for the undergraduates—and professors—(laughter)—of Glasgow University a holiday tomorrow, which was greeted with ringing cheers, and was subsequently granted by the Principal and members of the Senate.

Incensed Students Retaliate on Suffragette's Rooms.

Incensed at the Suffragette interruptions during the Rectorial address, a body of the students, numbering about two hundred, marched on the rooms of the Women's Social and Political Union in Sauchiehall Street, with the intention of wrecking them. Arriving in front of the premises, they attacked the large plate-glass window facing the street, and speedily demolished it with sticks and other weapons. A number of them scrambled through the aperture, and, entering the rooms, they proceeded to destroy everything they could lay their hands on. Although an attack had been expected by the women suffragists, no preparation had been made to protect the rooms, and the invaders engaged in their task without interference.

Victoria Infirmary: Reduction of Capital Fund.

The twenty-fifth annual report of the infirmary was submitted to the general meeting of contributors on December 5th, when it was stated that the daily average number of resident patients throughout the year was 254, as compared with 248 last year, and their period of residence was 28.3 days and 27.3 days. The total number of patients treated in the wards was 3,530, as compared with 3,560 in the previous year, being a decrease of 30. At no time during the year were there any vacant beds, the decrease being accounted for by the longer period each patient was in the infirmary as compared with the previous year, and also by some of the wards being closed for a short period whilst being re-painted.

Of the cases treated to a conclusion, 327, or a percentage of 10.02, died; but if 104 cases which were of such a nature that the patient died within 48 hours of being admitted are deducted, the death rate is thereby reduced to 7.02, the corresponding percentage last year being 9.15 and 6.37 respectively. In addition 920 cases of minor accidents were treated surgically.

At the infirmary dispensary for outdoor patients 4,591 individual cases were dealt with, involving 15,282 consultations, and at the Bellahouston Dispensary there had been 10,502 patients, involving 29,827 consultations.

The home at Largs continued a valuable adjunct to the infirmary, and during the year 657 patients had been transferred to it from the infirmary in a state of convalescence, compared with 668 last year.

The Governors regretted that the ordinary income fell short of the ordinary expenditure by £1,033 more than last year, arising to a considerable extent from the large increase in the price of coal during the long-continued strike last spring.

The total ordinary expenditure for maintaining the infirmary, Bellahouston dispensary, and the Convalescent Home was £19,500 15s. 9d., the ordinary income amounting to £12,478 13s., showing the very large deficit of £7,022 2s. 9d.

The sum of £4,933 9s. 2d. had to be taken from invested capital, which would entail a reduction of about £200 a year in the revenue from investments. The Governors earnestly appealed to the citizens of Glasgow and neighbourhood for increased support.

Public Health Service in Relation to the Insurance Act.

Dr. A. K. Chalmers, Medical Officer of Health for the City of Glasgow, delivered a lecture a few days ago at the University in connection with the Glasgow School of Social Study and Training, taking as his subject "The Relation of the Public Health Service to Private Medical Service in Relation to the Insurance Act." Dr. Chalmers referred to the provisions of the Act dealing with tubercular diseases, and pointed out that it was possible that medical benefits might become available for every period of life. The prevention of disease in the mass was, at the best, a negative quantity, and must needs be supplemented by the promotion of a healthy vigour in the individual. This was only able to be accomplished by the care of the individual from infancy onwards, the extension of the field of preventive medicine over the whole period of infancy and the school ages constituted a frank recognition by the State that positive effort to promote the rearing of healthy citizens must be regarded as among its first duties.

The Mental Deficiency Bill was a frank admission that the forms of mental defect with which it dealt were in the main truly hereditary, and could be prevented only by segregating the generation in which they appeared. Susceptibility to particular forms of communicable disease was no measure of physical fitness or unfitness. It was not the unfit who were selected as the victims of an epidemic of enteric fever, but those who were susceptible to this particular organism, and were unforunate enough to imbibe it in sufficient quantity. The successes of preventive medicine had been almost, if not exclusively, won in the field of environment. They had been won, not in defence of Nature's laws, but from man's perversion of them.

Further generalisations were given, and it was pointed out that if the individual patient was to benefit by them, their application must be thought out and directed by the general practitioner.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

TRADES UNIONS AND DOCTORS.

To the Editor of The Medical Press and Circular.

Sir,—If you will turn to the July number of *The Review of Reviews* you will find there an article headed Wanted: Sane Trade Unionism. You will also note a "sub-heading," "If this is Trade Unionism—End it."

If what we have read during the past week in the Press is trade unionism, then the sooner it is mended or ended the better.

The enclosed cutting is what I refer to.

"Trades Unions and Doctors.

"The Executive Board of the General Federation of Trade Unions for National Insurance and Friendly Society purposes passed a resolution protesting against the continued attempts of the medical profession to exploit the Insurance Act and to avoid any semblance of control by insured persons or their representatives, and urging upon the Government the need for an immediate settlement of the dispute concerning medical attendance by the creation of a State Medical Service or by the transference to credit of approved societies of those amounts last offered for medical attendance and medicine, 'in order that neither approved societies nor their members may suffer any further disadvantage or handicap through the refusal of the medical profession to accept the more than generous terms now offered.'

"Dr. Esmonde, M.P., in an open letter to general medical practitioners on the Insurance Act question, urges them 'to consider the welfare of the nation at large, and to free their minds from political or personal prejudice,' and suggests certain questions that might be answered, these relating to the capitation grant, free choice of doctors, and local administration."

Up to this I have always understood that the aim of trade unionists was to procure a living wage and reasonable conditions of service for workers. Is it not for these very principles we medical men are fighting? Hence, one would imagine the very last people to find fault with us for doing so would be trade unionists.

How was it that we, during the coal strike, did not pass a resolution calling on the Government to organise a military corps of miners "in order that we might not suffer any further disadvantage or handicap through the refusal of the miners to accept the more than generous terms offered"? Evidently, nowadays, what is sauce for the goose is not sauce for the gander. The Trades Unions have taught us the principles of the game. We are playing it in a sane manner, and thereby hope to bring some people to their senses.

I am, Sir, yours truly,
Cecil J. Corby.

Summerhill, Meath, November 30th, 1912.

THE FEEBLE-MINDED BILL.

To the Editor of The Medical Press and Circular.

Sir,—To-day's papers contain the news that the Mental Deficiency Bill, after safely passing through every vital stage before the Standing Committee charged with its consideration, has now been shelved on the ground that in view of the mass of controversial legislation before them, the Government are powerless to pass it through the House during the present Session. This may mean a delay of years in bringing into operation a law the urgent necessity for which has been demonstrated, and which has been pleaded for by every authority having valid claim to be heard on the subject. I am only one among many thousands who on these questions have no politics. We welcome real measures of social reform from whatever party emanating, and we deeply deplore the necessity of putting off such measures to give precedence to questions of high policy which do not offer remedies for the social diseases upon the cure of which national salvation depends. Home Rule, Tariff Reform, Disestablishment of the Church, and re-construction of the House of Lords may all be questions, the solution of which are urgently called for, but they are none of them so urgent as measures like the unfortunate Bill about which I write.

What a condemnation of our methods, and what a disappointment to social reformers this represents! Just consider the importance of legislation for the feeble-minded. We learnt from the Royal Commission that over 40,000 of the children in elementary schools, over one-fifth of the inmates of workhouses, one-tenth of the prisoners, one-half of the girls in rescue homes, one-tenth of the tramps of the country, and two-thirds of the inmates in homes for inebriates are mentally defective. That is the population with which the Bill seeks to deal. What about the public opinion behind it? Very many local authorities, Education Committees, Asylum Committees, and Boards of Guardians have urged upon the Government the need for immediate legislation. Philanthropic and charitable societies, agencies for the rescue and protection of children, girls, and women; in fact, all bodies devoted to social work have combined in favour of the Bill. In the meanwhile local authorities are hesitating as to taking up or increasing optional provision for the training of the feeble-minded, on the ground that legislation has been long promised and is absolutely essential before any lasting way of protecting the feeble-minded can be found.

Loss of measures of this kind is largely due to the deplorable fact now so prominent that the medical profession is almost completely lacking in political influence, and its counsel in matters of State has no value in the eyes of our legislators. My official position inclines me to veil my identity, and beg to be allowed to subscribe myself,

Sir, yours truly,
County Medical Officer.

December 7th, 1912.

THE PROSPECTS OF MEDICAL LAW REFORMS.

To the Editor of The Medical Press and Circular.

Sir,—It must be with surprise, as well as regret, that readers will see Mr. Sewill's pessimistic statement in your issue of to-day, November 20th, on the above-named subject. He now declares his belief that all chance of legislation to mitigate existing abuses has been destroyed by recent events. It is not long ago that he wrote to the effect that the case for medical law reform was overwhelming, and needed only stating in a sufficiently authoritative fashion to compel the attention of the Legislature. Those of us who have been working to promote the end in view, and who do not feel inclined to give up the fight without very good reason, would be glad to have a fuller explanation than is afforded in the letter I refer to.

I am, Sir, yours truly,
An Obscure Practitioner.

December 9th, 1912.

OBITUARY.

PROFESSOR LYNHAM, GALWAY.

It is with great regret that we record the death of Dr. John Isaac Lynham, Professor of Medicine at University College, Galway. He was 62 years of age, and his illness was known to be serious for several days before his death.

Dr. Lynham was educated at Queen's College, Galway, and graduated M.D. with a gold medal in the old Queen's University in 1875. Four years later he was appointed Professor of Practice of Medicine in his old school, and in 1893 he became Bursar of the College. These posts he retained to the time of his death. For many years he was a Fellow of the Royal University and one of the examiners in medicine for that body. He was also Physician to the County Galway Hospital. Lynham was therefore, for the past thirty years, brought into intimate contact, both as teacher and examiner, with successive generations of Irish medical students. He was a careful and painstaking teacher and a conscientious and fair examiner. Old Q.C.G. men all over the world will hear the news of his death with keen regret. By his colleagues he was held in deep personal affection.

His funeral took place last Thursday. The students of University College, in cap and gown, walked immediately behind the chief mourners. All the professors, in their gowns, followed, and the procession was one of the most imposing ever seen in Galway. Hundreds of the townspeople were present, and all the shops were closed as the funeral passed through the town to the new cemetery at Prospect Hill.

DR. WALTER BERNARD, LONDONDERRY.

The death took place at Buncrana, County Donegal, recently, of Dr. Walter Bernard, aged 85, one of the oldest medical practitioners in Ireland. Dr. Bernard obtained his qualification of M.R.C.S. of England just 60 years ago. He was a fellow of the Royal College of Physicians of Ireland since 1876. He was Surgeon-in-charge of the Second Division Army Works Corps through the Crimean War, and received high commendation for his bravery in grappling with the cholera epidemic in the British lines. On the voyage out he swam after, and saved the life of, a member of the Army Works Corps, who was carried away by the current when bathing in the Dardanelles. For this Dr. Bernard received the honorary silver medal of the Royal Humane Society. He held several appointments in Londonderry, where he practised for many years. He published some years ago a volume of reminiscences.

JOSEPH MORETON, M.D., OF MIDDLEWICH.

A feeling of deep grief was occasioned in the little town and ancient borough of Middlewich, Cheshire, when it became known that Dr. Joseph Moreton, of "The Beeches," had passed away. Deceased, who was 37 years of age, was the youngest son of Mr. T. B. Moreton, J.P., of Hartford. He had been in delicate health for a long time, but had managed to find strength of a sort to carry on his professional work. Ten days before his death he had an attack supposed to be of influenza; this was followed a few days later by heart failure, and he passed away on Friday, the 29th ult.

In his youth he attended the Victoria College, Congleton, where he took his degree of Bachelor of Science in 1895. He subsequently went to the Victoria University, Manchester, where he was highly successful as a student, and four years later passed the examination entitling him to the degrees of M.B. and B.Ch. with first-class honours. He was the author of "Treatment of Tuberculosis," which was the thesis for his degree of M.D., gained in 1903. Amongst his other first-class successes were the Dalton Natural History Exhibition, the Dauntesey Medical Scholarship, the Platt Physiological Exhibition (Junior and Senior), the University Scholarship in Medicine, the Dunville Surgical Scholarship, the Bradley Scholarship in Clinical Surgery (Manchester Royal Infirmary). Among his earlier appointments were House Surgeon to the Manchester Southern Hospital for Women and Children, House Surgeon to the Manchester Royal Infirmary, and Assistant Demonstrator of Anatomy in Owen's College. Not long after he was threatened with phthisis, and went to St. Moritz, then to sea for a time, later to South Africa, where he spent three years, and came back with his health re-established.

He commenced practice in Middlewich in 1905, where he continued to the time of his death. In the same year he married May, eldest daughter of Mr. Ezra Gandy, Acton Bridge, Cheshire, for whom much sympathy is felt in her sad bereavement.

His most important medical appointment was that of Medical Officer to the Isolation Hospital, Davenham, a position he held from the time of its opening to his death.

SPECIAL REPORTS.

RIGHT HON. DR. COX AND THE MEDICAL PROFESSION.

The following correspondence has taken place between the Hon. Secretary of the Dublin Local Medical Committee and the Right Hon. Dr. Michael F. Cox:—

November 13th, 1912.

To the Right Hon. M. F. Cox, M.D.

Dear Sir,—With reference to our brief conversation a few days ago, relative to the view you expressed at a meeting of the Advisory Committee held on October 30th, and reported in the *Evening Telegraph* of November 4th, I beg to amplify the remarks which I then made, and I deem it necessary to do so because it would appear that your views have been misinterpreted by a considerable number of your professional brethren who have been discussing them with me in my official capacity. I think, therefore, that in order to avoid any misunderstanding, the points at issue might with advantage be elucidated. More especially having regard to the prominent position which you hold in our profession any views which you give expression to are likely to be considered by the public as reflecting the opinions of a large section of Irish medical men.

First, with regard to the extension of medical benefits to this country: The profession in Ireland and in England have agreed to act loyally by each other in any arrangement with the Government which might be arrived at, so that if medical benefits be extended to Ireland they can be accepted only upon the same conditions as obtain in England.

Since this is so, the extension of the medical benefit clause of the Act cannot be made to include the family of the insured, as you suggested at the meeting. It is unreasonable to expect that in Ireland a doctor should give attendance to the insured and his family for the same fee which in England is considered inadequate remuneration for attendance upon the insured alone—the women and children in a family require far more medical attention than the men.

Further, having dissociated yourself from the policy of the B.M.A., with which most of your professional brethren have identified themselves, you are reported to have said that you have taken no part in recrimination or in acrimony, and that your hands were clean, your tongue was clean, and your pen was clean in this matter. This statement seems to imply that the profession or those acting for them have engaged in such practices, and that their actions were deserving of censure.

Permit me to say that if this interpretation is correct, and it is not the intention of those who read this meaning into what you have said to misrepresent you (your statement at the meeting was accepted as a repudiation of the policy of the profession), that neither in Dublin nor elsewhere in Ireland have the profession acted in any but an honourable and dignified manner, although they have been subjected to much provocation through letters appearing in the daily papers and comments in one weekly journal. Despite all this invective, the profession has kept its temper, and more especially does this apply to the Dublin County Borough Local Medical Committee. It is not the fault of my Committee that a conference to discuss the local dispute with the Friendly Societies was not held, because when a conference was suggested, my Committee expressed their willingness to participate in it.

I am, yours faithfully,
(Signed) Maurice R. J. Hayes,
Hon. Sec.

26 Merrion Square, Dublin,
November 14th, 1912.

Dear Dr. Hayes,—I received your letter this morning, and hasten to answer it. I am amazed that such a misconstruction should have been put upon my words. I could not have thought it possible.

On the occasion referred to, words of offence and insult were used towards our profession, and I found myself accused of having fomented strife, when I could have procured a peaceful settlement. I repelled the aspersions cast upon our profession, and recalled the sacrifices made, even of life itself, by many members of the profession. I deprecated, and deplored, the use of bitter and acrimonious language—I pleaded for conciliation not conflict. Of the accusation made against myself I said that my hand and pen and tongue were clean; I spoke for, not against, the profession to which I have the honour to belong, and from whose honour and fame I have never detracted. As for the Advisory Committee, I was appointed not by the British Medical Association, but by the Irish Insurance Commissioners. I did not seek appointment. I have not resigned, because I thought I might be of more use to our profession, and our people by remaining on, and because I did not wish to seem to cast a vote against a vital measure of a Government pledged to Home Rule for Ireland.

As for the extension of medical benefits to Ireland, that I thought was demanded at the beginning. Is it now repudiated?

I laid down no terms, but I expressed the opinion that wives and children are no less deserving of care than husbands or even fathers.

I further expressed the opinion that when Home Rule comes, as come it must, one of the first measures of a Home Rule Parliament will be a thorough reform of the Poor Law system—which would settle the entire question of medical service in Ireland, on terms fair to the profession, and just to the people, whose welfare is our greatest ambition.

I am, dear Dr. Hayes, faithfully yours,
(Signed) Michael F. Cox.

November 25th, 1912.

The Right Hon. M. F. Cox, M.D.

Dear Sir,—I placed the recent correspondence which passed between us relative to your speech at the meeting of the Advisory Committee before my Committee at their last meeting, and I amplified the explanation in your letter by repeating the statements which you made to me in conversation.

I am directed to state my Committee were very pleased to note that you repudiate the interpretation which has been put upon the speech to which I drew your attention, and that your views with regard to the just claims of the profession are not at variance with those of your fellow-practitioners.

I am also directed to request your permission to publish this correspondence in the Press, as my Committee feel assured that you would not wish the public to misinterpret your views. That they have done so is clear from the interpretation put upon them by Mr. J. D. Nugent in his speech as reported in the *Freeman's Journal* of the 21st inst.

I am, yours faithfully,
(Signed) Maurice R. J. Hayes,
Hon. Sec.

REVIEWS OF BOOKS.

THE CLINICAL PATHOLOGY OF SYPHILIS. (a)

The author commences with the methods of detecting *spirochætæ pallidæ*, and gives the latest views on the subject of re-infection and immunity. He next deals with syphilitic anæmias, and, although only nine pages are devoted to them, the subject is fully discussed in all stages of acquired and hereditary syphilis.

(a) "The Clinical Pathology of Syphilis and Parasyphilis and its Value for Diagnosis and Controlling Treatment." By Hugh W. Bayly, M.A., M.R.C.S., L.R.C.P.Lond., Clinical Pathologist to the London Lock Hospitals. Crown 8vo. Pp. XIV. and 194. Plates three. Figures in text, 22. London: Bailliere, Tindall and Cox. 1912. Price 5s. net.

The Wassermann reaction, the advantages of the original *technique*, and later modifications are all fully discussed. Considerable space is devoted to the nervous system, and the diagnostic value of the Wassermann reaction in the examination of the cerebro-spinal fluid is given. Special praise is due to the masterly handling of syphilitic nephritis. The whole subject of salvarsan, its administration and the advantages derived from it are gone into thoroughly, and the author suggests the advisability of combining salvarsan and mercurial treatment.

In a brief summary it is stated that general paralysis is the only one of all syphilitic affections in which a negative Wassermann is of definite clinical value, and that the cases that are benefited by treatment are few. A negative Wassermann cannot put tabes out of court.

The Wassermann is most valuable in diagnosing latent syphilis. In suspected hereditary syphilis, a negative Wassermann is strongly against the lesions being due to syphilis.

The book supplies all the information that is required by the practitioner and pathologist. Being well-bound in leather, it would be capable of resisting the rough usage of laboratory work.

A SYSTEM OF TREATMENT. (*a*)

Vols. I. and II. are cercerned with general medicine and surgery. Dr. Mitchell Bruce deals with the principles of treatment in the opening chapter of Vol. I., and comments upon the important points so as to bring out the special value of each example. The management of the sick room is ably discussed, and will be found to give confidence to the nurse, with a number of valuable directions from the pen of Miss McCall Anderson, while the general hygiene and care of infants and young children by Dr. Eustace Smith, of the East London Hospital for Children, gives a well-considered and exhaustive survey of that department of medicine in which he is so deeply interested. General treatment of infectious diseases are considered by Dr. Foord Caiger and Dr. Cuff, and they emphasise the importance of giving diphtheritic serum early, even although the diagnosis be somewhat doubtful. The treatment of typhoid fever by Colonel Reid Roberts will give the practitioner much aid in the directions and various methods in regard to the management of this disease of defence, not of attack, and the complications likely to be met with are ably discussed. To the forefront is the space which has been allocated to the treatment of pulmonary tuberculosis in four valuable articles, the author's knowledge in respect to sanatoria, tuberculin, graduated labour, and the induction of artificial pneumothorax is most clearly described, along with the class of patient that is most suitable for the different treatment. The illustrated paper by Sir Wm. Bennett on varicose veins and varicocele gives a very excellent account of the operative procedure. Dr. W. Hale White does not advocate the routine methods of administering expectorants during pneumonia, but for the heart failure usually accompanying this disease he considers pituitary extract to be a better drug than adrenalin.

Vol. II.—Diseases of the blood and blood-forming organs are discussed by Dr. Herbert French and Prof. Murray, who have summarised the treatment of a difficult subject in a most explicit and comprehensive manner. Mr. P. Lockhart Mummery's contributions are chiefly concerned with the large intestine and rectum; and Mr. A. W. Mayo Robson deals in a very able manner with the affections of the stomach and pancreas. Mr. Jonathan Hutchinson, dealing with affections of the tongue, is a very valuable asset to this volume. Mr. J. W. Thomson Walker, in the treatment of kidney affections, gives a terse and adequate account of its various sections; and Mr. T. Crisp English presents to the practitioner, busily engaged with other subjects, in treatment of affections of the breast, a mine of information in the minimum of space.

Vol. III. deals with the special subjects of medicine, including, amongst others, affections of the eyes, nose, ear, throat, skin diseases and dental surgery, while hypnotism, serum and vaccine therapy, electric medication massage, Bier's treatment, are all found to be adequately dealt with. A very useful chapter on "Anæsthetics" is that written by Dr. J. Blumfeld, whereby the dangers and difficulties which beset the anæsthetist are satisfactorily discussed. Mr. Herbert F. Waterhouse is a valuable exponent of Bier's treatment, but is of the opinion that it is a neglected remedy in this country; and the late Dr. William R. Huggard's article on climatology should be read if only to assist the practitioner in the selection of localities for his patients. Dr. Gustav Hamel, in a useful article on massage, and Dr. A. Primrose Wales, on mechanical vibration, are deserving of praise for their interesting accounts and methods, which are fully explained. As specially interesting in present circumstances are the number of disorders, along with the most minute description of manipulation with which Dr. John F. Woods is able to combat by the aid of hypnotism; and the practice of serum therapy and vaccine therapy, by Dr. Arthur Latham, is full of interest, with articles on each individual organism by capable authorities is an advance in the right direction.

Tropical fevers are well to the front, and the reader will have little difficulty in acquiring such knowledge as he is likely to need in this country.

Mr. William Milligan is an able contributor, and offers many valuable suggestions out of the ordinary beaten track in his essays on diseases and affections of the ear.

Vol. IV. is concerned with the treatment from the obstetric and gynæcological standpoint. When it is remembered that the contents are written by Dr. J. W. Ballantyne, Mr. John Bland-Sutton, Dr. E. Hastings Tweedy, Mr. Victor Bonney, Dr. Comyns Berkeley, to mention a few, our expectation is that a large amount of information will be forthcoming, and in this we are not disappointed. The general management of pregnancy, puberty and the menopause is especially worthy of note, and along with the medical side of treatment in the case of pregnant women, forms an important and interesting treatise.

Dr. Darwell Smith deals with the management of contracted pelvis in a masterly manner. Rupture of the uterus, by Dr. Cuthbert Lockyer, gives an accurate idea of what treatment to adopt, along with a vast amount of references on his subject. The second half of the book brings the treatment of gynæcology a stage nearer to the door of the general practitioner, and the short articles of Mr. John Bland Sutton are directly to the point at issue without any super-abundant packing.

Dr. G. Bellingham Smith deals with diseases of the bladder and urethra in a thoroughly practical and scientific fashion.

The System of Treatment as a volume is admirably arranged, and the sketches that illustrate the various situations are clear and accurate. The volume is presented in an attractive format, and should receive a welcome from the general practitioner, the specialist and others interested in medicine as being full of fact and solid information. The list of authors are in the very forefront of their own speciality, and no doubt exists of their competency to deal with his subject. A great advantage is that all the volumes are published at the same time, and each volume is provided with a full and complete index, not only for its own book, but also for the series, and the whole volume reflects credit both on the editors and publishers.

STUDIES IN CLINICAL MEDICINE. (*a*)

Most of these studies have already appeared in the medical magazines. Their subject matter is widely diverse, and the advantage of having them collected in a single volume is not altogether obvious. At the same time we are bound to admit that we have derived both

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(*a*) "A System of Treatment." In Four Volumes. Edited by Arthur Latham, M.D.Oxon., F.R.C.P., Physician to St. George's Hospital, and T. Crisp English, B.S.Lond., F.R.C.S., Senior Assistant Surgeon to St. George's Hospital. London: J. and A. Churchill. 1912. Price £4 4s. net.

(*a*) "Studies in Clinical Medicine." By C. O. Hawthorne, M.D. Pp. 441. London: John Bale, Sons and Danielsson, Ltd. 1912.

pleasure and profit from a perusal of the book. The article on the cerebral and ocular complications of anæmia is decidedly useful, and there is a most helpful "clinique" on septic endocarditis. We have seen just such a case as the author describes where there was little fever, and intrinsic cardiac signs were not much in evidence. There is much useful information on a variety of common ailments, and there are interesting essays on sudden greyness of the hair and on the Pharmacopœia. Altogether the book is a delightfully written medical miscellany.

EXPERIMENTAL PHYSIOLOGY. (*a*)

This volume is based on the author's directions for class work in "Practical Physiology." In its present form it is a considerable improvement on the latter work. Not only have the directions been re-written and the diagrams been re-drawn, but we venture to think that in several instances the exercises have been better arranged. Much new matter has been added in the form of experiments illustrative of the physiology of the circulation, central nervous system, special senses, etc. The directions are clearly given, and the book should find favour with teachers of physiology and those who have to pass examinations on the subject.

Among the Christmas annuals for 1912 that have reached us may be mentioned that of our contemporary, *Truth*. Always humorous, incisive, sarcastic; the present issue is one of its most successful and entertaining ventures in versification that we remember. The whole literary output is after the manner of the author of "Ingoldsby Legends," full of amusing quips and shafts at the powers that be. The coloured plates too, in which Mr. Lloyd George's physiognomy is a prominent feature, will attract attention, whilst that entitled "Two Sides of Holloway," wherein the prisoner of low degree is depicted with the prison warder, with "skilly," as her only visitor, and the militant suffragette is allowed a physician to see after her health, and champagne as an item in her daily menu, will necessarily evolve mingled criticism according to the views held of "Votes for Women."

NEW BOOKS AND NEW EDITIONS.

The following have been received for review since the publication of our last monthly list:—

Appleton, D., and Co. (London).
The Surgical Diseases of Children. By W. F. Campbell, A.B., M.D., and Le Grand Kerr, M.D. Illustrated. Pp. 693. Price 25s. net.
Diseases of Children. By Benjamin Knox Rachford. Pp. 783. Price 25s. net.

Arnold, Edward (London).
International Medical Monographs. General Editors: Leonard and Lead Absorption. By Thomas M. Legge, M.D.Oxon., D.P.H.Cantab., and Kenneth W. Goadby, M.R.C.S., D.P.H.Cantab. Price 12s. 6d. net.
The Carrier Problem in Infectious Diseases. By J. C. G. Ledingham, M.B., D.Sc., and J. A. Arkwright, M.D. Pp. 319. Price 12s. 6d. net.
The Protein Element in Nutrition. By Major D. McCay, M.B., B.Ch., B.A.O., M.R.C.P., I.M.S. Pp. 216. Price 10s. 6d. net.
Forensic Medicine and Toxicology. By C. O. Hawthorne, M.D. Third Edition. Pp. 344. Price 6s. net.

Bailliere, Tindall, and Cox (London)
Papers on Psycho-analysis. By Ernest Jones, M.D.Lond., M.R.C.P.Lond. Pp. 432. Price 10s. 6d. net.
From Cloud to Sunshine: Algiers and Algeria. By Alfred S. Gubb, M.D. Pp. 114. Price 2s. net.
Lectures on Clinical Psychiatry. By Emil Kraepelin. Authorised Translation from the German Edition, revised and edited by Thomas Johnstone, M.D.Edin., M.R.C.P. Lond. Third English Edition. Pp. 368. Price 10s. 6d. net.
Aids to Gynæcology. By S. Jervois Aarons, M.D.Edin., M.R.C.P.Lond. Fifth Edition. Pp. 124. Price 2s. 6d. net.

Bale, John, Sons, and Danielsson, Ltd. (London).
The Internal Secretory Organs: their Physiology and Pathology. By Professor Dr. Arthur Biedl, Vienna. With an Introductory Preface by Leonard Williams, M.D., M.R.C.P. Translated by Linda Forster. Pp. 586. Price 21s. net.

Churchill, J. and A. (London).
Year-Book of Pharmacy. Comprising abstracts of Papers contributed to British and Foreign Journals with the Transactions of the British Pharmaceutical Conference held in Edinburgh, July, 1912. Edited by J. O. Braithwaite, and Horace Fenninore, B.Sc. Pp. 644. Price 10s. net.
Elementary Clinical Pathology for Nurses. By George Herschell, M.D.Lond., and Richard Weiss, Ph.D., M.A., F.C.S. Second Edition. Pp. 30. Price 1s. net.
Transactions of the Ophthalmological Society of the United Kingdom. Vol. 32. 1912. Price 4s. net.

Fifield, A. C. (London).
The Nature of a Woman. By J. Lionel Tayler, M.R.C.S., L.R.C.P. Pp. 186. Price 3s. 6d. net.

Griffin, Charles, and Co., Ltd. (London).
Clinical Medicine. A Manual for the Use of Students and Junior Practitioners. By Judson S. Bury, M.D.Lond., F.R.C.P., P.Sc.Vict. Third Edition. Edited by Judson S. Bury, and A. Ramsbottom, M.D., M.R.C.P. Illustrated. Pp. 530. Price 17s. 6d. net.

Hazell, Watson and Viney, Ltd. (London).
Hazell's Annual for 1913. A Record of the Men and Movements of the Time. Edited by Hammond Hall. Pp. 592.

Hirschfeld Bros., Ltd. (London).
The Illness and Death of Napoleon Bonaparte. (A Medical Criticism.) By Arnold Chaplin, M.D.Cantab. Pp. 312. Price 2s. 6d.

Jack, T. C. and E. C. (London and Edinburgh); Dodge Publishing Co. (New York).
Hypnotism and Self-Education. By A. M. Hutchison, M.D. Pp. 92. Price, cloth, 6d. net.
The Baby: A Mother's Book by a Mother. By a University Woman. Pp. 94. Price, cloth, 6d. net.
Marriage and Motherhood: A Wife's Handbook. By Hugh S. Davidson, M.B., F.R.C.S.Edin. Pp. 94. Price, cloth, 6d. net.

Lewis, H. K. (London).
Surgery of the Brain and Spinal Cord. Based on Personal Experiences. By Professor Fedor Krause, M.D. English Adaptation by Dr. Max Thorek (Rush M.C. Univ. of Chicago). Vols. 2 and 3. Price 30s. each net.
Vaccine Therapy: Its Theory and Practice. By R. W. Allan, M.D., B.S.Lond. Fourth Edition. Pp. 444. Price 9s. net.

Longmans, Green and Co. (London).
Geometrical Optics. By Archibald Stanley Percival, M.A M.B., B.C.Cantab. With Diagrams. Pp. 132. Price 4s. 6d. net.

Maclehose, J., and Sons (Glasgow).
A Manual of Immunity. For Students and Practitioners. By Elizabeth T. Fraser, M.D.Glas. Pp. 199. Price 5s. net.

Macmillan and Co., Ltd. (London).
Diseases of the Liver, Gall-Bladder, and Bile-Ducts. By Humphry Davy Rolleston, M.A., M.D.Cantab., F.R.C.P. Pp. 811. Price 25s. net.

Oxford University Press (London).
Manual of Operative Surgery. By H. J. Waring, M.S., M.B., B.Sc.Lond., F.R.C.S. Fourth Edition. Pp. 778. Price 12s. 6d. net.
Cunningham's Manual of Practical Anatomy. By the late D. J. Cunningham, M.D. Vol. II. Fifth Edition revised by Arthur Robinson. Illustrated. Pp. 616. Price 10s. 6d. net.
Manual of Medicine. By A. S. Woodwark, M.D., M.R.C.P. Pp. 409. Price 10s. 6d. net.

Paul, Stanley, and Co. (London).
The Physiology of Faith and Fear or the Mind in Health and Disease. By William S. Sadler, M.D Illustrated. Pp. 580.

Saunders (W. B.) Company (Philadelphia).
Nutritional Physiology. By Percy Goldthwaite Stiles Pp. 272. Price 6s. net.
A Text-Book of General Bacteriology. By Edwin O. Jordan, Ph.D. Third Edition, thoroughly revised. Pp. 623. Price 13s. net.
A Text-Book on the Practice of Gynæcology. For Practitioners and Students. By William Easterly Ashton, M.D., LL.D. Illustrated. Fifth Edition, thoroughly revised. Pp. 1,100. Price 27s. 6d. net.
A Text-Book of Obstretrics. By Barton Cooke Hirst, M.D. Seventh Edition, revised and enlarged. Pp. 1,013. Price 21s. net.

University of London Press (London).
Treatment After Operation. By William Turner, M.S., F.R.C.S., and E. Rock Curling, B.S., F.R.C.S., with a Chapter on the Eye. By L. V. Cargill, F.R.C.S. Pp. 247. Price 10s. 6d. net.
Diseases of the Eye. By C. Devereux Marshall, F.R.C.S. Illustrated. Pp. 303. Price 10s. 6d. net.
The Medical Diseases of Children. By T. R. C. Whipham, M.A., M.D.Oxon., M.R.C.P. Illustrated. Pp. 417. Price 10s. 6d. net.

Wright, John, and Sons, Ltd. (Bristol); Simpkin, Marshall, Hamilton, Kent, and Co., Ltd. (London).
Pye's Surgical Handicraft: A Manual of Surgical Manipulations and Minor Surgery. Edited and largely re-written by W. H. Clayton-Greene, B.A., M.B., B.C.Cantab. F.R.C.S.Eng. Sixth Edition. Fully revised and illustrated. Pp. 595. Price 12s. 6d. net.
A Manual of Infectious Diseases occurring in Schools. By H. G. Armstrong, M.R.C.S., L.S.A., and J. M. Fortescue-Brickdale, M.A., M.D. Pp. 150. Price 3s. net.

NEW APPLIANCES.

ARNOLD'S "MOSANA" SANITARY TOWEL.

We have been favoured with a sample of Dr. Degen's sanitary towel for ladies, which seems excellently well adapted for the purpose. On the one hand it is smooth and soft, giving to the outlines of the body, and preventing irritation and discomfort, and on the other hand its pad is thoroughly absorbent, preventing the permeating of moisture and the soiling of the underwear.

(*a*) "Experimental Physiology." By E. A. Schäfer, F.R.S. Pp. 111. London: Longmans, Green and Co. 1912. Price 4s. 6d.

A combination of wool and an outer covering has been invented which preserves the good qualities of the padding. The latter is covered by a wide mesh net of fine but strong thread in such a way that the facings consist, as it were of wool, which follows closely and smoothly the outline of the body, and for this reason this sanitary towel is said to be exceptionally soft and comfortable in wear, making friction and inflammation impossible. The safety loop of the "Mosana" sanitary towel prevents any accident due to its becoming detached.

This towel possesses not only softness and flexibility, but also the important hygienic properties of Dr. Von Brun's antiseptic surgical wool of which it is largely composed. In addition, the cellular antiseptic wool padding possesses great absorbent power.

No medical man, in short, need hesitate in recommending the "Mosana" sanitary towel to his patients. A special belt for attachment can also be obtained. Messrs. Arnold and Sons, Giltspur Street, London, E.C., are the manufacturers.

Medical News in Brief.

Organisation of the Profession in Dublin.

The following resolution was passed unanimously at the last meeting of the Dublin County Borough Local Medical Committee:—"That the Hon. Secretary be requested to draw the attention of medical men in the County Borough who have signed the undertaking to the fact that the terms of the undertaking pledge them not to accept any appointments from societies except through the Local Medical Committee, whether remuneration be by capitation, by fee, or by salary."

Women's National Health Association.

A special Council meeting of the Women's National Health Association was held last week in the Theatre of the Royal Dublin Society, Leinster House. The Countess of Aberdeen, President, occupied the chair, and there was a good attendance of members.

Her Excellency said that there were several reasons for holding that meeting. The first was the fact of the completion of the incorporation of the Association, which had been under consideration for a considerable time past, and which had only been carried out that morning. Up to that the Association had no legal status for any course of action which it might take, and each member was liable for any acts of the Association which might afterwards be held to have been indiscreet. Now that the Association was duly incorporated under the Board of Trade all that was changed, and it could enter as an Association into every class of business in its corporate capacity, and individual members got rid of their liabilities, with the single exception of being liable, in the event of the Association being at any time wound up, to the extent of the sum of 10s. at the outside; and as an approved society under the Insurance Act their Society and their members would be represented on the Insurance Committees throughout the country, and make the influence of their experience felt. Her Excellency then detailed the various matters with which the Association proposed to deal in its newly incorporated form, such as the promotion of sanatoria, the establishment of playgrounds, and other matters relating to the public health.

After some discussion as to the holding next year of a Health Week in connection with the work of the Association, the project was approved of, and it was decided to accept the invitation of the Agenda Club to organise a Health Week in Ireland from the 6th to the 12th April, 1913, and Her Excellency was appointed as representative of the Women's National Health Association on the General Committee of the scheme.

Several branches of the activity of the Association came under discussion.

The Hospital Sunday Fund.

At a meeting of the Metropolitan Hospital Sunday Fund at the Mansion House, on Monday last, presided over by the Lord Mayor, it was reported that the collections for the year amounted to £67,972 14s. 3d., an increase of £957 over last year. The collections in the various places of worship had resulted in a sum of £35,866 being collected, this being £1,195 less than in 1911, while the balance was made up by special donations, legacies, and collections. The working expenses amounted to £3,125 7s. 7d., as compared with £3,447 17s. 5d. in 1911. It was arranged that Hospital Sunday for next year should be held on May 25th.

University of London.

A meeting was held at the University on Foundation Day (November 28th), the Principal, Sir Henry Miers, presiding, to consider the question of establishing a Club for graduates, teachers and officers of the University. In the letter convening the meeting it was stated that the Senate, while disapproving of the formation of a social club of which men and women undergraduates could become members, would welcome the establishment of a Club for graduates, teachers and officers, and would be prepared to consider an application for an annual subvention if the premises provided satisfactory accommodation for the meetings and business of Ungraduates' Societies and for other University purposes. A resolution moved by Mr. Wickham Hurd, LL.B., proposing the establishment of a Club on the general lines approved by the Senate was carried unanimously and a Committee was appointed to consider the best means of carrying the resolution into effect, with instructions that the Club should be a members' club in preference to a proprietary club. The Committee are to report to another general meeting.

Royal College of Surgeons in Ireland.

The following candidates have passed the undermentioned Examinations, November, 1912:—

Primary Fellowship Examination.—Miss L. M. Ghose, Miss S. Hoashoo, Mr. L. S. Modi, Mr. J. A. Musgrave, and Mr. L. M. Rowlette.

Final Fellowship Examination.—Mr. Moore Betty, Mr. J. L. Bocarro, Mr. T. Crawford Boyd, Miss Ma Saw Sa, and Mr. P. McCartan.

Final Dental Examination.—Mr. Henry Flavelle Holmes, Mr. Edward Lanigan, Mr. Kieran McGrath, Mr. William John Marmion, and Mr. Thomas Stanley Sullivan.

Trinity College, Dublin.

The following candidates have passed the Final Medical Examination, Part II. (Michaelmas Term, 1912):—

Surgery.—Eileen M. Hewitt, Frederick B. McCarter (passed on high marks), Robert Hemphill, Jacobus M. S. Gericke, Walter Crane, Hubert T. Bates, Kenneth K. Drury, William Frier, William P. Croker, Charles D. Goodenough, Jevon H. Powell, Joseph A. Maxwell, Charles W. C. Myles, Richard S. G. Halpin, Robert A. G. Elliott, Bernard G. Quinlan, Oswald C. S. Tandy, Edgar H. Wilkins, William E. Fetherstonhaugh, George J. Meldon, Georgina Revington, Reginald O. Smyth, James A. Small.

Midwifery.—John W. C. Stubbs, Jevon H. Powell (passed on high marks), David H. Hadden, Frederick G. Flood, Mabel A. Dobbin, Theodore W. Allen, William F. Evans, Charles W. C. Myles, Etienne J. Malherbe, Charles J. O'Reilly, John T. Simpson, Edgar H. Wilkins, Thomas F. Breen, Joseph Harvey, Frederick R. Dougan, Reginald H. Jones, Geoffrey A. Hoffman, Hedley Boyers, Joseph S. English.

License in Dental Science.—William G. Kingston.

University of Oxford.

The following degree has been conferred:—D.M.—W. D. Sturrock, Magdalen.

University of Cambridge.

The following degrees have been conferred:—

M.D.—H. B. Carlill, St. John's.

M.C.—A. H. Crook, Christ's.

M.B. and B.C.—J. Winterbotham, King's; B. A. Playne, Pembroke; W. H. Cam and A. H. Gosse, Caius.

M.B.—A. H. Crook, D. Embleton, Christ's.

NOTICES TO CORRESPONDENTS, &c.

☞ CORRESPONDENTS requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

SUBSCRIPTIONS may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

ORIGINAL ARTICLES OR LETTERS intended for publication should be written on one side of the paper only and must be authenticated with the name and address of the writer, not necessarily for publication, but as evidence of identity.

ADVERTISEMENTS.

FOR ONE INSERTION:—Whole Page, £5; Half Page, £2 10s.; Quarter Page, £1 5s.; One-eighth, 12s. 6d.

The following reductions are made for a series:—Whole Page, 13 insertions, at £3 10s.; 26 at £3 3s.; 52 insertions at £3, and pro rata for smaller spaces.

REPRINTS.—Reprints of articles appearing in this JOURNAL can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

CONTRIBUTORS are kindly requested to send their communications, if resident in England or the Colonies, to the Editor at the London office, 8 Henrietta Street, Strand; if resident in Ireland to the Dublin office, in order to save time in reforwarding from office to office. When sending subscriptions the same rule applies as to office; these should be addressed to the Publisher.

M.B. (Brockley).—We quite agree that used tram and 'bus tickets may be a source of danger to health, especially when, as is too often the case, small children are allowed to collect them from the floor and seats. The suggestion of Dr. Killick Millard, the Medical Officer of Health for Leicester, is a timely one. It consists of dropping the used ticket into a receptacle provided for the purpose on leaving the vehicle.

"THE MEDICAL WHO'S WHO" for 1913.

WE are asked by the editors of this Directory to announce that they will be glad to receive the corrected particulars from those members of the profession who have not yet returned them, before the 31st inst., addressed to the publishing offices, 6, Henrietta Street, Strand, London.

DR. T. F. (I.W.).—Lecithin has been found useful in conditions of gastro-intestinal auto-intoxication, as well as in debilitated states and nervous affections generally.

CREMATION IN SCOTLAND.

THE annual report of the Scottish Cremation Society states that during the year ending on September 30th last there were at the Glasgow Crematorium 44 cremations, as compared with 35 in the preceding year and 26 in the year before. Altogether, since the crematorium was opened, 420 cremations have taken place. There was a financial surplus of £71 last year. The ordinary charge for cremation is £6 6s. The directors of the society believe that there are now evidences of the beginnings of a great forward movement in the adoption of cremation. A special crypt for the reception of urns has been erected in St. Columba's Presbyterian Church, London, and the cremated ashes of the late Bishop of Truro have been deposited in Truro Cathedral. Mr. A. Philip, Panmure Street, Brechin, is one of the branch secretaries of the Scottish society.

HUMOUR OF MEDICAL PRACTICE.

A LITTLE girl once asked a doctor why he put so much water into his medicine. She received the answer "To make it pleasant," to which she retorted gravely, "It does seem a waste of water."

A chemist was once sorely puzzled by a girl's request for "Glory Divine." After some time he found that what she really wanted was "chloride of lime."—Dr. Norman Porritt at Romford.

MR. W. J. M. (Bournemouth) is thanked for his communication which is marked for insertion.

Meetings of the Societies, Lectures, &c.

WEDNESDAY, DECEMBER 11TH.

HUNTERIAN SOCIETY (St. Bartholomew's Hospital, E.C.).—9 p.m.: Clinical and Pathological Evening.

UNITED SERVICES MEDICAL SOCIETY (Royal Army Medical School, Greenwich.).—5 p.m.: Fleet-Surgeon Munday, R.N.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan). 5.30 p.m.: Eye Operations (Mr. Brooks).

BROMPTON HOSPITAL FOR CONSUMPTION.—4.30 p.m.: Lecture by Dr. Bosanquet: Affections of the Œsophagus.

THURSDAY, DECEMBER 12TH.

ROYAL SOCIETY OF MEDICINE (SECTION OF BALNEOLOGY AND CLIMATOLOGY) (1 Wimpole Street, W.).—5.30 p.m.: Paper: Dr. William Bain (Harrogate): The Medical Treatment of Gall-stone Disease.

CHILD STUDY SOCIETY, LONDON (Royal Sanitary Institute, 90 Buckingham Palace Road, S.W.).—7.30 p.m.: Dr. C. S. Myers.

HARVEIAN SOCIETY OF LONDON (Stafford Rooms, Titchborne Street, W.).—8.30 p.m.: Mr. C. W. M. Hope.

NORTH-EAST LONDON POST-GRADUATE COLLEGE (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel). 4.30 p.m.: Lecture: Mr. W. Steuart: Diagnosis by Bismuth X-Rays.

THE NEW LONDON DERMATOLOGICAL SOCIETY (Western Skin Hospital, Hampstead Road, N.W.).—4.30 p.m.: Meeting. Clinical Cases.

FRIDAY, DECEMBER 13TH.

ROYAL SOCIETY OF MEDICINE (SECTION FOR THE STUDY OF DISEASES IN CHILDREN) (1 Wimpole Street, W.).—4.30 p.m.: Discussion: On the Treatment of Heart Disease in Children (opened by Dr. Edmund Cautley and Dr. James Mackenzie). The following will take part in the discussion:—Dr. John Hay (Liverpool), Dr. C. W. Chapman, Dr. Walter Carr, Dr. Sutherland, Dr. Alexander Morison, Dr. Poynton, and Dr. F. W. Price

ROYAL SOCIETY OF MEDICINE (CLINICAL SECTION) (1 Wimpole Street, W.).—8.30 p.m.: Cases by Mr. Ralph Thompson, Mr. Parkes Weber, Mr. T. H. Kellock, Dr. Essex Wynter, and others. Paper: Mr. T. H. Kellock: Pneumonotomy.

MONDAY, DECEMBER 16TH.

MEDICAL SOCIETY OF LONDON (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Continuation of discussion on "Interstitial Stasis," by Sir Bertrand Dawson, Dr. James Mackenzie, Mr. Creasy, Dr. Distaso, Mr. Barrington Ward, Dr. Schlesinger, Mr. J. E. Waugh, Mr. Peter Daniel, Dr. Ofenheim, Dr. G. Rowell, and Dr. Wainwright.

Appointments.

COPE, V. ZACHARY, M.D., M.S.Lond., F.R.C.S.Eng., Surgeon to the Bolingbroke Hospital, Wandsworth.

EDMONSTONE, C. G., M.B., B.Ch.Edin., F.R.C.S.Edin., Certifying Surgeon under the Factory and Workshop Acts for Swanscombe District of the county of Kent.

GLENDINING, BRYDEN, M.B., M.S.Durh., F.R.C.S.Eng., Gynæcologist to the Hampstead General and North-West London Hospital.

GRAHAM, G. M., M.B., Ch.Edin., Junior Assistant Medical Officer at the Stirling District Asylum, Larbert.

HOWELL, B. WHITCHURCH, M.R.C.S., L.R.C.P., House Physician at the Royal Free Hospital.

MIDDLETON, Miss, Clinical Assistant to the Royal Free Hospital

Vacancies.

County Asylum, Lancaster.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, and attendance. Applications to the Medical Superintendent.

Middlesex County Asylum (near Wandsworth Common Station, L.B. and S.C.R.).—Third Assistant Medical Officer. Salary £200 per annum, with full board, lodging, etc. Applications to the Medical Superintendent.

State Criminal Lunatic Asylum, Rampton, South Leverton, Lincoln.—Assistant Medical Officer. Salary £225 per annum, with furnished quarters, coals, light, and attendance. Applications to the Medical Superintendent.

Royal Hospital for Diseases of the Chest, City Road, E.C.—Resident Medical Officer. Salary £120 per annum, with board, lodging, and washing. Applications to the Secretary.

Caterham Asylum.—Third Assistant Medical Officer. Salary £150 per annum, with board, lodging, and washing. Applications to the Medical Superintendent.

Births.

BEATTIE.—On Dec. 5th, at 3 Ellison Place, Newcastle-upon-Tyne to Dr. and Mrs. Thomas Beattie, a son.

FRASER.—On Dec. 6th, the wife of Capt. F. C. Fraser, I.M.S., of a son.

TARBET.—On Nov. 28th, at Stevenage, Herts, the wife of Peter Rowley Tarbet, M.R.C.S., L.R.C.P., of a son.

Marriages.

BOURNE—HAYWARD.—On Dec. 3rd, at the Wesleyan Church, New Barnet, Aleck William Bourne, M.B., B.C., F.R.C.S., to Bessie Winifred, eldest daughter of Mr. and Mrs. G. W. Hayward, of Ingleside, New Barnet

CHAPMAN—RODGERS.—On Dec. 7th, at St. Stephen's Church, Tonbridge, Raymond John Chapman, M.D., D.P.H., eldest son of the Vicar of the Parish, and Gertrude Madeline Naomi Rodgers, daughter of the late Thomas William Rodgers, Esq., of Belfast.

NICHOLSON—ROBINSON.—On Nov. 15th, at St. Thomas' Cathedral, Bombay, Captain Mark Alleyne Nicholson, I.M.S., to Anne Elizabeth, second daughter of T. Robinson, Esq., The Chestnuts, Danby, Yorkshire.

ROSE—HARRIS.—On Dec. 4th, at All Souls, London, Frank Atcherly Rose, F.R.C.S., of 3 Upper Wimpole Street, to Marian Elizabeth Darling, only daughter of Dr. Alfred C. E. Harris, J.P., of Birkenhead.

Deaths.

ERSKINE.—On Dec. 5th, Ellen Erskine, dearly beloved wife of Robert Erskine, M.D., of 62 Pembridge Villas, W.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, DECEMBER 18, 1912. No. 25.

NOTES AND COMMENTS.

A Hospital Board with Convictions.

AN editorial comment in a lay contemporary alludes to a somewhat new phase in an old standing medical grievance. It states on the strength of a letter from a correspondent that recently a certain London hospital advertised a vacancy for an assistant surgeon. The terms of the appointment prescribed that candidates must be Fellows of the Royal College of Surgeons of England. In the present instance it is stated that at least one gentleman holding that qualification sent in his application, but the Board appointed another candidate who was not thus qualified. Their explanation is that they thought it right to waive the condition of appointment in view of the exceptional attainments and experience of the selected candidate. However that may be, so high-handed a step requires more justification than that contained in the foregoing off-hand statement. The condition, whether good or bad, in itself forms part of the hospital rules and regulations, and having been published in the advertisement for candidates the Board is bound to observe it as a mere matter of good faith and common fairness. The very fact that they have been induced in the present case to break their own law indicates the inherent weakness of the regulation itself, but that does not excuse the Board from the consequences entailed by non-observance of its own deliberate conditions.

"No Scotch or Irish Need Apply."

WE have often commented upon the unfairness of the rule that reserves the honorary staff appointments in the large London and in many provincial hospitals for men holding the higher qualifications of the English College of Surgeons and the London College of Physicians. At a single stroke it excludes not only the diplomates of the Scotch and Irish Colleges, but the holders of University degrees in all parts of the Kingdom. Of late years large and flourishing universities have been founded in various parts of England and Wales, and as the number of their medical graduates increases that of the English colleges is likely to fall off in corresponding ratio. Indeed, it may be shrewdly suspected that many provincial men take a higher diploma in London simply with a view of qualifying for a hospital post. It has been said that the multiplication of provincial qualifications will in the course of time solve the difficulty. For all that the unfair restriction in favour of particular colleges must work a great deal of injustice so long as it remains unsettled. Should the Insurance Act bring any measure of State payment to the holders of hospital staff appointments it will necessarily involve the throwing open of such posts to all who hold a legal qualification to practise medicine or surgery. Such a result would incidentally mean that sooner or later the State would be called upon to consider the question of a one-portal system of medical qualification.

A Matter of Diagnosis.

One of the hardest lessons that the unitiated have to learn is that medicine is an art rather than an exact science. If this fact were more generally realised much annoyance would often be spared the patient, and the professional actions of medical men would less frequently become the subject of worrying litigation. A case was tried a short time back in Bridlington County Court, in which a charge of negligence was alleged against a well-known medical practitioner for having failed to diagnose an abdominal tumour, the patient's condition being taken by him for pregnancy. The expected event not taking place after the usual period, further advice was sought, resulting in the removal of a tumour weighing over twelve pounds fifteen months after the original diagnosis had been made. The extreme difficulty sometimes encountered in the differential diagnosis of pregnancy and other abdominal conditions is well known, and the very elect have, at times, been quite deceived as to the true state of affairs, even after the most exhaustive examination. The learned deputy-judge was of the opinion that, under the circumstances, no charge of negligence had been substantiated, since a medical man could not do impossible things. It is not always feasible to submit the patient to a radioscopic examination, though, when this can be done, it will often settle the diagnosis one way or the other.

The Unknown Factor in Treatment.

Another medico-legal case of interest to medical men generally, but especially to those who practise electro-therapeutics, is that tried last week at the Birmingham Assizes. The defendants were Dr. J. F. Hall-Edwards and Dr. Emrys Jones, the well-known medical radiographers, the plaintiff bringing an action against them to recover damages for personal injuries sustained through their alleged negligence. The patient, who was suffering from analgesia of the lower extremities and elsewhere, was treated by diathermy, and it was alleged that sparking had occurred, resulting in a form of dermatitis of the leg, from which he was said to have been disabled for nine months. In the evidence of the defendants it was stated that sparking, such as had been described, was impossible with a diathermic apparatus as used by them. Some idiosyncrasy of the tissues of the patient might readily account for the result produced, for it is well known that a person's vulnerability to such injuries is greatly dependent upon the state of nutrition and nerve-supply of the integument. It is these unknown and unforeseen factors which give rise to many of the inexplicable results in the treatment of disease, in spite of the fact that every precaution has been taken to safeguard the patient. A verdict was returned for the defendants, showing that the element of uncertainty which necessarily pervades the whole of medical treatment is rightly recognised as a powerful factor by those upon whom the responsibility for giving such a decision rests.

LEADING ARTICLES.

THE VERDICT OF THE B.M.A. PLEBISCITE.

THE divisions of the British Medical Association, together with those non-members who accepted the invitation to vote with them, have by a large majority, decided to refuse service under the Insurance Act. In a great number of instances the proportion against acceptance has been five or ten to one, and in some towns, such as Southport, and counties, such as North-East and South-East Essex, it has been unanimous. Some unexpected results have been recorded. In Gateshead, for example, a large majority of medical men voted in favour of acceptance of Mr. Lloyd George's latest terms, whereas they were rejected by the neighbouring practitioners of Newcastle. Birmingham declined the proposals by so narrow a margin that its representative was instructed to vote at the central meeting in accordance with the views of the majority upon that occasion. The Birmingham practitioners in favour of serving under the Act have issued a circular which explains their position. The document is signed by a number of medical men. They estimate that in their town there are more than 500,000 insured persons, the remuneration for attending whom, at 7s. a head, would be £100,000. Of the 400 doctors in Birmingham 300 are in general practice, and if they all served they would have an average annual income of £300 from the insured alone, in addition to their fees from other patients. "Can we," they ask, "afford to reject this?" They further add their opinion that this is the last offer they need expect from the Government. Refusal of the latest terms will be followed by the formation of a whole-time service. They conclude that a number of medical men will be at once available for beginning such an organisation in Birmingham, and that if once formed, the general practitioner will find himself left out in the cold. If the opinion of the majority as recorded in the Association plebiscite is to be maintained, the medical benefits of the Insurance Act will not be available by the middle of January. It is tolerably certain that a certain number of medical men will be found ready to accept service despite the opposition of their fellow practitioners. We doubt, however, if they will be found in sufficient numbers to undertake more than a small part of the service. It may be hoped and believed that the medical profession of the United Kingdom, having arrived at a deliberate majority decision, will loyally abide by that result. On the Government side an official paper has been issued to all medical men inviting them to accept service under the Act, and to signify their intention before the end of the year, as otherwise, so it is intimated, their names will not be available for service by January 13th, the date on which medical benefit comes into operation. It is difficult to forecast either the issue or the exact methods of the conflict that has now entered into its final stage. The next move must come from the Government. So far as the medical profession is concerned it is not likely to be kept long in suspense as to its chief point of weakness, namely, disloyalty within its own ranks. Apart from this one element of danger, medical men may feel assured of the ultimate success of the fight which has been forced upon them in defence of their plain and legitimate interests.

COMPENSATION FOR SLAUGHTER OF TUBERCULAR CATTLE.

AMONGST the vanishing infections one of the more obstinate is that of tuberculosis. In spite of all scientific advances it exacts a heavy toll from the population of the United Kingdom, and, although an eminently preventable disease, has so far shown small signs of being effectually prevented. The general conclusion from a medical standpoint is that it is possible to cure many cases of local and of pulmonary tuberculosis, but that little can be done in the later stages of the disease. With that experience in view the efforts at prevention, as apart from cure, have received more and more attention at the hands of public health investigators. The later developments of the matter may be said to date from the reports of the British Royal Commission on Tuberculosis, which upset Koch's heresy and demonstrated the identity of human and bovine tuberculosis. From that moment the mind of the scientific investigator became impressed with the supreme importance of dealing with comparative tuberculosis, more especially in those of the lower animals directly or indirectly utilised for the food of man. So far as the infected meat has been concerned, a great deal has been done in recent years to exclude the carcases of tuberculous animals from our ports, and by stricter and more skilled supervision to weed it out of the home markets. The great source of infection through the milk of tuberculous cows, however, remained practically untreated It has long been known that by that particular agency of distribution the specific germs of tuberculosis can be conveyed in an active condition, while the undue incidence of tuberculosis upon the infantile population rendered it practically certain that a vast amount of disease originated in the dairy farm and the town dairy. Under such circumstances the step clearly demanded for the reduction of the crusade against tuberculosis to a logical basis was to rid the kingdom of tubercular cattle. Nothing short of that radical procedure could accomplish the desired end of ultimate eradication. The best efforts of the sanitarians were robbed of their full measure of success so long as an unlimited amount of infection was being constantly spread through the agency of meat and of milk. The main difficulty in the path of any radical reform in this matter lay in the enormous amount of money that would be required to compensate the owners of infected animals. It is with peculiar satisfaction, therefore, that those interested in public health will receive an official announcement from Mr. Runciman, President of the Board of Agriculture, made last week at Whitehall to the National Farmers' Union. He laid down the important proposition that if the slaughter of tubercular cattle took place in the interests of the country as a whole, then the country should be prepared to compensate the farmer for his loss. He had convinced the Treasury, so he said, of the soundness of that view, and he hoped shortly to publish details of a scheme that would redound to the advantage of the community. A large sum of money would be required for the purpose during the first year, but the amount would be a diminishing one in later years. In many ways we regard this as the most important advance that could be undertaken in the fight against tuberculosis. It strikes at the root of the evil and brings us within sight of the disappearance of that scourge into the limbo of extermination that, so far as the United Kingdom is concerned, has happily overtaken plague, cholera and typhus, not to mention others that have been practically ousted. Now that a proper system has been introduced in the sanatorium and home treatment of consumptives, and the general standards of personal and public hygiene raised to a fairly satisfactory level, there is every hope that the last link in the chain of prevention will be supplied by the scheme of compensation for compulsory slaughter foreshadowed by Mr. Runciman.

CURRENT TOPICS.

The Health of the Army in 1911.

The report of the Director-General of the Army Medical Service upon the health of the troops at home and abroad for 1911 has just been issued. It is highly satisfactory to note that the improvement in the health of the troops is maintained, and that the ratios for admissions to hospital, invalids discharged, and the average number constantly sick are the lowest recorded. The number of recruits brought up for medical inspection was an increase of more than 2,500 over that for 1910, which was partly due to the recent strikes, which influenced recruiting favourably. The better training and instruction of recruiters has led to an improvement as regards the reduction of rejections and early wastage during the past couple of years. The most frequent causes of rejection of recruits in 1911 were diseases of the heart, 41.24 per 1,000; under chest measurement, 30.47 per 1,000; and defective dentition, 26.05 per 1,000. During the past year 1,868 men were invalided from the service, 659 of whom came from stations abroad, giving a ratio of 8.09 per 1,000, which is the lowest on record. Diseases of the nervous system again give the highest ratio, while tuberculosis and circulatory diseases show a slight decrease on the previous year. Syphilis and digestive disorders show the most pronounced downward curve in the incidence chart. The figures for venereal disease in the army quartered in the United Kingdom are, on the whole, encouraging, and it is to be anticipated that the military inefficiency due to this disease will be further diminished when the combined salvarsan and mercurial treatment becomes universal throughout the army. It has been found that the administration of salvarsan by the intravenous method greatly shortens the time spent in hospital in each case. The ratio of constant sickness per 1,000 of strength was 20.1 in 1911, as compared with 20.4 in 1910, and it is gratifying to observe that these ratios have shown a gradual but steady decrease, year by year. With regard to military hygiene the report states that the consensus of opinion in the various Commands confirms the general impression of improvement in the sanitary administration of the different camps held during the year. Much useful work has been done at the Royal Army Medical College and School of Army Sanitation at Aldershot in connection with field service rations and the supply of a "safe" water to troops in the field. It may be noted that the Army Council has decided to encourage the practice of anti-typhoid inoculation in the army, and with this object explanatory pamphlets in popular language are approved for issue to soldiers on reaching the age when they become eligible for service in the field. In India there is again a considerable decrease in all the ratios, except that for deaths, which gives a very slight increase, chiefly due to cholera and plague. The general improvement reported last year in all the Colonies is likewise well maintained. The report may be considered, therefore, as an eloquent witness to the valuable results that are obtained from the practical application of modern scientific medicine to the daily life and routine of the soldier.

The Medical Acts and the Home Rule Bill.

It is a matter for regret that Mr. Birrell has so completely misunderstood the question of Ireland in regard to the Medical and Dental Acts as to have rejected almost with contempt Sir Philip Magnus' amendment to the Home Rule Bill. Sir Philip Magnus moved a clause intended to prevent the Irish Parliament from dealing with the several Medical and Dental Acts, and to maintain the present powers of the General Medical Council. Mr. Birrell's curt reply was to the effect that the medical profession in Ireland was well able to look after itself, and that it need not be feared that it would act in a retrograde fashion. This argument misses the point altogether. It is not a question of the standard in one part of the three kingdoms being higher or lower than in another. Medical education in Ireland has long been noted for the high standard maintained. It would, however, be very inconvenient to have separate authorities in the different countries. At present, medical men pass freely from one country to another. If, however, the Irish Parliament were to establish its own Medical Council, with authority over medical education and registration, medical men registered in Ireland might find themselves barred from crossing the Channel. The position would be more than inconvenient, it might easily become intolerable. The Government may be quite right in being unwilling unduly to restrict the powers of the Irish legislature, but if any matters are reserved for the Westminster Parliament, we think that this should be. At the same time, we do not, of course, suppose that an Irish Government is likely to do anything which might injure medical education in Ireland.

The Friendly Societies and the Profession in Dublin.

An important development has taken place in the relations between the friendly societies and the medical profession of Dublin. On October 1st the medical officers of the various friendly societies in Dublin gave notice to their societies that after December 31st they would continue to give their services only on the terms which had been agreed upon by the profession. The time of the expiration of these notices is fast approaching, and many of the friendly societies have recognised the necessity for coming to terms without further delay. As a result, some dozen or more of the friendly societies operating in Dublin—including one of the most important in Ireland—asked last week for an opportunity to put their views before the local Medical Committee. The Committee, therefore, received several deputations last Saturday night. It was gratifying to find that the members of the deputations were unanimous in admitting the obligation the societies were under to their medical officers for their services in the past, and the inadequacy of the remuneration hitherto given. They were willing to offer a distinct advance in the amount of remuneration, though the offer was still behind the demands of the profession. The problem presents many difficulties, but we are sure that personal intercourse, by way of conference between the societies and the profession, is the way by which their solution is most likely to be reached.

The Night Employment of Youths.

An interesting report of the Departmental Committee on the night employment of male young persons in factories and workshops was issued last week as a Parliamentary paper. It is stated that the Committee, though sensible of the fact that night work for boys is both unnatural and undesirable in principle, yet realise that it is essential in necessarily continuous processes in certain industries at the present time, in order to avoid unreasonable loss from waste of fuel or valuable material. Opinions, even of medical men, are apt to differ as to the effects of such employment upon the health of boys, and weighing experiments, carried out by Drs. Bowden and Darcy Ellis, certifying factory surgeons, tend to show that there is little difference between boys who work by day and by night on alternate weeks, and boys who work by day only. An important general conclusion arrived at is that the alternation from day to night work does not always allow sufficient time for the worker to adapt himself to the unnatural conditions. Other objections mentioned are loss of the beneficial effects of sunlight, broken sleep, greater fatigue, irregular meals, less close supervision, and the deprivation of the opportunity of attending evening classes. For these reasons the Committee are strongly of the opinion that the employment of youths under eighteen at night in factories is undesirable. If such employment is inevitable, the employers should see to it that every possible mitigating precaution is adopted.

The New Beit Memorial Fellows.

At at meeting of the trustees of the Beit Memorial Fellowships for Medical Research held last week seven men and two women were elected to Fellowships, six of the former and one of the latter being members of the medical profession. Dr. R. A. Chisholm, who has already undertaken cancer research work, will investigate the production of nephritis by experimental methods and the problems arising therefrom. Dr. D. V. Cow proposes to inquire into the diuretic action of certain tissue extracts, especially that obtained from the intestinal mucous membrane. He will also investigate certain bacterial diseases with the object of ascertaining any possible beneficent action thereon of organic compounds of a non-toxic nature. Dr. A. B. Macallum will study certain problems in metabolism in disease, especially those concerned with the formation of urea and allied compounds. Dr. J. McIntosh, who has already contributed much towards our knowledge of syphilis and its modern treatment, will continue to work at the subject from the point of view of immunity. Dr. S. W. Patterson will investigate the fate of lævulose in the normal and diabetic organism, and, later, he will prosecute a research into the toxæmias of intestinal origin, especially the influence of diet on the production of poisonous products. Dr. H. L. H. Schutze proposes to investigate the modern absorption theory of the union between bacillary antigen and the antibodies of the blood serum. Dr. E. J. Dalzell will undertake a research into gastro-enteric diseases in infants. Of the non-medical Fellows, Dr. I. Smedley will continue her investigations into the formation of fat in the organism; Dr. C. Funk will investigate the nature of the so-called deficiency diseases (beri-beri, scurvy, etc.); while Miss H. L. M. Pixell will prosecute a research into the life histories of the parasitic protozoa. The reputation enjoyed by all the new Fellows is such that much useful information may be expected as a result of their individual researches.

Suicide.

Australia at present is suffering from an epidemic of suicide, mostly by the methods of drinking lysol, or eating "Rough on Rats." It is a curious fact and one which almost seems to justify the jury's conventional verdict, that a suicide always chooses a handy and fashionable exit regardless of the inconvenience his lack of thought may give him on the way. Few consult their æsthetic sensibilities like Mr. Mantalini. Humanitarians implore the press to refrain from publishing suicide stories, and the press responds by asserting its inalienable right to publish news. Neither side even attempts to controvert the fact that papers convey the suicidal infection as easily as they do that of scarlatina. The fact is as obvious as it is incomprehensible. We have not yet made up our minds whether suicide is the expression of transcendental heroism or the basest cowardice; probably it is sometimes one, sometimes the other, and often in the same individual we would find it hard to draw the line as long as we continue to class moral and physical courage as different types of the same thing. About the only thing we may be sure suicide is not is temporary insanity. The argument seems to be that no sane man commits suicide, therefore he who commits suicide is not sane, and when he is definitely shown to be of at least normal intellect "temporary" saves us from inevitably stultifying ourselves. The Salvation Army has established a bureau for the prevention of self-destruction, and this institution has been the means of saving the lives of those who while not unwilling to live, despaired of solving the problem of "the concatenation of self-existence."

The Advancement of the Anthropoid Ape.

A committee headed by Professor Waldeyer has been formed to establish an institute for the psychological study of the anthropoid. It is estimated that another century will see the extinction of the gorilla, gibbon, chimpanzee, and the other higher apes. Science owes a great debt to these higher monkeys, and she is now determined to squeeze every drop from the simian soul before the last of the great apes walks through the valley of the shadow of death. Somewhere in the Canaries gorillas and chimpanzees are to be collected and studied. It will be an island like that of Dr. Moreau, except that plastic surgery will give way to experimental psychology. Phonation, gesture, comprehension of the spoken word, enumeration, colour perception and educational possibilities are to be studied. Savages who dwell amongst the anthropoids have a universal belief that the latter are not mere brutes, but men like themselves, and the investigators hope to discover mental traits hitherto unknown. The subject is a great and interesting one, but we hope that the education of the ape will not proceed too far. A speaking, sensible and Samsonian gorilla would be a terror in the land, unless indeed he developed like Peacocke's famous Sir Oran. If we are prepared to look upon the anthropoids as men and brothers, we must above all things bear in mind that we are our brothers' keepers.

The National League for Physical Education and Improvement.

The Seventh Annual General Meeting of the National League for Physical Education and Improvement was held at the Mansion House yesterday afternoon as a joint meeting with the Mansion House Council on Health and Housing, the Lord Mayor presiding. With a view of ensuring co-ordination and harmony of action, and to prevent overlapping, the two bodies have now amalgamated. Of even greater importance than this union is the recent federation with the League of the National Association for the Prevention of Infant Mortality and for the Welfare of Infancy. Centralisation and concentration of effort in health matters is powerful for good, and it cannot be too strongly emphasised that the League is always ready to co-operate with other organisations, and is, indeed, anxious to bind together all societies and individuals working for the physical welfare of the nation. The special campaigns organised during the past year, according to the annual report, with regard to the manufacture and sale of "safe" flannelette, the physical education summer school, and the health week of 1912, are worthy of the highest sympathy and support of all those who have the physical well-being of the nation at heart. A goodly list of practical pamphlets, written in a terse and popular style, are now published by the League, and these may be specially recommended for wide distribution among the public.

PERSONAL.

Dr. J. Bradford, of Exeter, has been returned a Conservative member of the Exeter City Council.

Dr. Douglas H. Freshwater, M.A., M.D., B.C. Cantab., has been appointed Physician to the Western Skin Hospital.

Dr. John O'Donnell has been elected Consulting and Visiting Medical Officer to the Crooksling Sanatorium, co. Dublin.

Dr. George Emerson Brewer, of New York, has been elected President of the Clinical Congress of Surgeons of North America.

Dr. E. Rayner, of Stockport, has been elected President of the Association of Certifying Factory Surgeons for the ensuing year.

Dr. Ivy E. Haslam, M.D., B.S., M.R.C.P.Lond., has been appointed Honorary Pathologist to the Warneford General Hospital, Leamington.

Dr. William James Howarth, M.D., Ch.B.Vict., D.P.H., Medical Officer of the County of Kent, has been appointed Medical Officer of Health of the City of London.

Mr. D'Arcy Power, F.R.C.S., has been nominated to represent the Royal College of Surgeons of England at the International Historical Congress to be held in London during April, 1913.

Mr. Frederick Sydenham, M.D.Edin., F.R.C.S. Edin., D.P.H., has been appointed Honorary Surgeon for Diseases of the Ear, Nose, and Throat at the Warneford General Hospital, Leamington.

Dr. T. Wingate Todd, Lecturer on Anatomy at the Manchester University, has been appointed Henry Wilson Payne Professor of Anatomy in the Medical Department of the Western Reserve University, Cleveland, Ohio.

Professor Arthur Keith, Conservator of the Museum of the Royal College of Surgeons of England, has been elected Chairman of the Committee which has just been formed for the purpose of organising a museum in connection with the 17th International Congress of Medicine to be held in London next year.

Capt. R. Markham Carter, I.M.S., has been appointed by His Excellency the Governor of Bombay in Council to officiate as Resident Surgeon at St. George's Hospital, Bombay, and Professor of Materia Medica and Pharmacy to the Grant Medical College, Bombay, in succession to Capt. R. F. Steele, granted leave of absence.

Mr. Robert John Montgomery, F.R.C.S.I., M.A., M.B., of Dublin, left personal estate valued at £4,823. The testator left £5,000 to the Board of Dublin University and the Royal College of Surgeons, Ireland, for a "Mary Louisa Montgomery Lectureship" in Ophthalmology, to be held alternately by the said boards for a period of five years, the lectureship for the first five years after his death being held by Dublin University.

A CLINICAL LECTURE
ON
BULBAR AND PSEUDO-BULBAR PARALYSIS.

By F. C. PURSER, M.D., F.R.C.P.I.,

Assistant Physician, Richmond, Whitworth and Hardwicke Hospital.

GENTLEMEN,—I wish to consider with you to-day the condition of two patients who have so many symptoms in common that careless observation would lead you to suppose they were suffering from the same disease. Both patients are men well over 50 years of age, both are unable to sing, whistle, speak, smile, or protrude their tongues, when asked to do so. Both have difficulty in swallowing—especially in swallowing liquids. In appearance they are not unlike, especially in the motionless expression of the lower part of their faces. But the similarity of the two conditions is only superficial, as a little investigation will show. One patient, we are told, has been suffering between two and three years, and during that time he has been getting step by step steadily worse. He has had no other serious ailment. The second patient, who has had other paralytic trouble before this one developed, became affected suddenly about six years ago, and any little change in his condition during those years has been for the better.

Let us examine the former patient first. You see that when asked to put out his tongue he can get it no further forward than his teeth; and you will notice how small the tongue is and how furrowed. His tongue is paralysed, so that he has little or no voluntary power over it to move it in any direction, and, moreover, its musculature is wasted, as its small size shows. The many furrows in its surface are evidence of the extent of the wasting. It shows also fine waves over its surface; these are due to involuntary contractions of little muscle bundles. "Fibrillary twitchings," as they are called, are a sign of progressive wasting, and occur in muscles other than the tongue in states analogous to this.

When he attempts to whistle, for which he has little heart, or to blow out his cheeks, he has no power in the orbicularis oris to purse up his lips, and so his breath puffs out unhindered. His lips, like his tongue, seem thin and wasted, and there is a distinct tendency for the lower lip to droop, which adds to his discomfort, for it allows the saliva to dribble constantly away. When he tries to speak he cannot make himself understood; he cannot produce even a vocal sound. His attempts to do so end in a soft, hoarse guttural. The difficulty in articulation is due, of course, to the condition of his lips and tongue; the aphonia is due to his inability to adduct his vocal cords. Fortunately he has little weakness in the abductors, for that would lead to great narrowing of the glottis during inspiration, and a consequent, perhaps fatal, dyspnœa. Swallowing is also a difficulty. Liquids regurgitate through the nose because the movements of the soft palate are defective, and the nasal cavity is imperfectly shut off from the buccal. He finds it hard to collect dry, solid food into a bolus, and to get the bolus, when collected, back into the pharynx. Once there it goes down readily enough, but often he is unfortunate and a crumb "goes the wrong way." His expulsive efforts, rendered ineffective by his inability to adduct his vocal cords, remove foreign bodies from the larynx with great difficulty, so that for him this accident is more than an inconvenience; the inhalation of food particles constitutes the very real danger of "aspiration pneumonia." Semi-solid food, like nicely-boiled egg, thick stirabout and jelly, are easiest of ingestion.

These represent the signs of the disease. There are no sensory disturbances whatever; there is no difficulty in biting, the eyelids can be closed tightly; there is no ocular palsy; there is no dyspnœa or alteration in the pulse rate. The symptoms are purely motor symptoms; the motor portion alone of the nervous system is involved. And we can at once limit the site of the lesion to the nerves supplying the affected muscles or their nuclei of origin, for in lesions of the motor tract above the nuclei there is none of the wasting which is so prominent a feature in this patient's muscles. The nerves involved are the 12th especially, and part of the 7th, and the bulbar portion of the spinal accessory, which is now regarded as belonging to the 10th cranial nerve. It is extremely improbable that symptoms so limited have been produced by a neuritis, still more improbable that they are due to multiple lesions affecting symmetrically the affected nerves. The symmetry and the limitation of the symptoms, then, force us to leave a lesion of the nerve trunks out of consideration. We must then locate the disease in the nuclei of the 12th, 7th and 10th cranial nerves, and in view of the slow but progressive course of the disease, we must regard the lesion as degenerative in nature. We are, in fact, dealing with the condition known as labio-glosso-laryngeal paralysis, or progressive bulbar paralysis, in which there is found a degeneration of the cells in the nuclei of the medulla oblongata. The cause of this degeneration is not understood; it is attributed to cold, exposure, worry, over-use—vague enough exciting causes—acting on nerve cells which have an innate tendency to premature degeneration.

The ætiology of the disease being vague, the treatment being of little avail, and the prognosis only too easily guessed, our interest in the condition would seem to be confined to the problem of diagnosis. In a well-developed, typical case, such as this, the condition once seen will not be readily forgotten. The slow, progressive course and the symmetry of the localised wasting without other symptoms or signs occur in no other disease. At its onset, however, it is not so easily recognised. The patient complains of nothing but an indistinctness in speech, especially in words containing t, d, p, b, r, l. This precedes wasting or visible weakness, and may be the first indication of anything wrong. The possibility of the case being one of general paralysis of the insane will occur to you, particularly if the patient give a history of lues: but absence of mental symptoms, pupillary changes, and inequalities in the knee-jerks will help to make the diagnosis. But one may have to wait for wasting to occur to be quite sure, and in the meanwhile urge your patients to try deliberately to speak distinctly; they can often do so unexpectedly well, no doubt by contracting more forcibly the muscle fibres supplied by cells as yet intact. Occasionally cases are met with where symptoms just like these, including wasting, have come on suddenly—acute bulbar paralysis. These are dependent on vascular changes, usually thrombosis, in the little vessels supplying the medulla. But they are usually more random in their distribution than the degenerative lesion, and when not fatal at the outset they tend to lessen in severity rather than to increase.

I need not point out the similarity between this disease and the much commoner progressive muscular atrophy, which is due to degeneration in the cells in the anterior horns of the spinal cord. There is no doubt the diseases are one and the same—it is a matter of the location of the degeneration whether the disease is " bulbar paralysis " or " progressive muscular atrophy " of spinal origin. Bulbar paralysis frequently supervenes on a progressive muscular atrophy, and wasting in the limbs is not infrequently observed after bulbar symptoms have been well established. And just as with progressive muscular atrophy, we often get a spastic condition of the limbs with increased tendon reflexes, and dorsiflexion of the toes on stroking the soles, so in bulbar paralysis we may find similar phenomena in the limbs. This is worth remembering lest its discovery may cause a doubt in the diagnosis.

There is a point of great interest, pointed out by Gowers, which is well illustrated by this case—namely the tendency of the degenerative process to affect parts in close functional relation to each other apart from any anatomical contiguity. Thus we see that with paralysis of the tongue there is a paralysis also of the lower part of the face. But the orbicularis palpebrarum and frontalis muscles, which also are supplied by the facial, are unaffected. When, as sometimes happens, the ocular nuclei are attacked by the degeneration the 3rd nerve nucleus and the 6th, and even the upper part of the 7th, suffer together. These nuclei have a close functional relation to each other, though anatomically they are far apart—much further apart than the 12th and 7th nuclei. What the exact connection between the 12th and 7th nuclei is is not determined, but that it is very close you can easily prove for yourselves. If you try to protrude your tongue flat you can do so only by making the orifice of your mouth as wide as possible, and no effort to narrow your tongue by contracting its transverse fibres will be successful unless you at the same time narrow the orifice of your mouth.

Bulbar paralysis has so far proved beyond remedy. Treatment must be symptomatic. Avoid what may add to the danger, such as exposure, which may lead to laryngitis and bronchitis. Strychnine hypodermically, phosphorus and arsenic may be tried, but at best they only stay the rapidity of the degeneration. In cases which give a syphilitic history mercury, iodides, and salvarsan should be given.

Now let us examine our other patient. He, too, has imperfect voluntary control over the muscles of his lips and tongue. He has rather more control over his larynx, and his palate moves fairly well now. He has less power in the masseters, and he cannot move his jaw at all from side to side. But the essential difference between the two cases is that in this instance there is no wasting to speak of, and no fibrillary twitching, which are such prominent features in the first case. This is because the lesions which have given rise to his condition are situated above the nuclei which directly innervate and preside over the nutrition of the affected muscles.

The history of this patient is very interesting, and as he has been under observation ever since he first got ill it is fairly trustworthy. He is a right-handed man. Eight years ago he got a slight right-sided hemiplegia when out walking. It was attended with no loss of consciousness and no convulsions, and he was able to walk slowly home. The weakness was extremely slight; there was little dysarthria, no aphasia. Some months later he got another attack on the same side, and yet a third attack—both extremely slight. The dysarthria and residual right-sided weakness were really inconsiderable. About six years ago, while sitting quietly reading, the patient suffered from a momentary loss of consciousness, followed by weakness in the left arm and leg. Considerable difficulty in swallowing followed immediately, saliva dribbled profusely and unchecked from his mouth. His speech an hour later was hardly intelligible, and in two days had become quite unintelligible. To make a long story short, he recovered a fair amount of power in his lips and in swallowing, and the arm and leg also improved. But his power of speaking has not returned in all these years. Mentally he is very bright, and is able to follow his sedentary occupation efficiently.

The explanation of this sequence of events I suppose to be this. There have been a succession of thromboses in small vessels in the brain. The first three were in the left hemisphere. They were not in the cortex, but somewhere in the pyramidal tract, where the fibres are close together—quite likely at the *genu* of the internal capsule. They were not in the cortex, because if there to give rise to such widespread symptoms the area affected would have been necessarily large, and aphasia would probably have resulted also. The trifling involvement of the face and tongue and the sparing of the larynx and palate were due to the fact that their muscles on each side have a double cortical innervation. The muscles supplied by cranial nerves on one side are innervated principally from the opposite side of the brain, but also very largely from the same side of the brain. Hence paralytic symptoms, even when the principal innervation path is destroyed, are slight in these regions as compared with the paralysis of the limbs, and when they occur they tend to disappear comparatively rapidly. This is most especially true as regards the vagus, but it holds, though less completely, for the other cranial nerves also. The final attack was of rather greater severity than the others. It was due to a lesion in the right cerebral hemisphere in a position probably similar to those in the left hemisphere. By cutting off the innervation from the right cortex it has given rise to the affection of the cranial nerves which we have jus examined.

There is one further point to which I wish to direct your attention. The patient, despite his hard lot, seems a very hilarious person. A triv pleasantry leads to an outburst of merriment quit too flattering to its deserts—and when the patient laughs his whole face is contorted with glee. The muscles we have been looking on as partially paralysed appear suddenly to have acquired a power of contracting greater than we expect in health. This is due to the uncontrolled action of some subcortical centre on the bulbar nuclei. In the beautiful simplicity of upper and lower motor neurone symptoms, which forms the A.B.C. of diagnosis of diseases of the nervous system, we are apt to forget that tracts other than the pyramidal tracts also act on the lowest nuclei. Probably, though not absolutely certainly, the optic thalamus is the centre wherein arise the outward expressions of emotion. It acts under the control of the cortex as a rule.

In this case, probably, it acts unrestrained—the cortico-thalamic fibres having been involved in the softenings. The reverse occasionally is met with—the patient smiles perhaps only with one side of his face when he is genuinely amused, but when he comes to smile voluntarily there is nothing to choose between the two sides. This patient may go on as he is for many years, but it is unlikely now, six years from his last stroke, that he will get any better.

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by H. E. Symes-Thompson, M.A., M.D.Cantab., M.R.C.P.Lond., Assistant Physician to the Royal Hospital for Diseases of the Chest. Subject: "The Selection of Cases of Pulmonary Tuberculosis for Institutional, Domiciliary and Dispensary Treatment under the National Insurance Act."*

ORIGINAL PAPERS.

THE NEUROLOGY OF THE VISUAL SYSTEM.

A Short Series of Original Papers.

By HARRY CAMPBELL, M.D., F.R.C.P.,

Physician to the West End Hospital for Diseases of the Nervous System.

PAPER V.

The Intrinsic Muscles of the Globes.

Nerve supply.—The globe and its intrinsic muscles are supplied by the two long ciliary nerves from the nasal, and six to twelve short ciliary nerves from the ciliary ganglion. This consists of a small reddish mass situated between the optic nerve and the external rectus (see fig. 29.) It receives a sensory branch from the nasal division of the opthalmic nerve, a motor (autonomic) branch from the inferior division of the third nerve, and a branch from the cervical sympathetic.

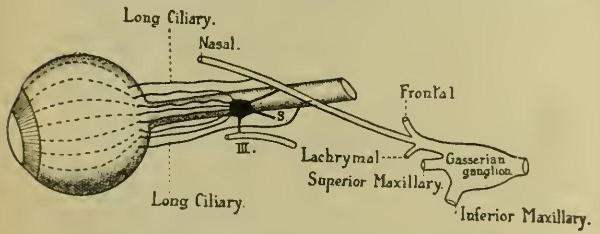

Fig. 29.—Diagram of the ciliary ganglion and the ciliary nerves. The ganglion is seen to spring from three roots—one from the nasal, one from the sympathetic, and one from the third nerve. It gives off six to twelve short ciliary nerves. The nasal gives off two long ciliary nerves. The ciliary nerves, long and short, pierce the sclerotic near the entrance of the optic nerve, and course forward between this and the choroid, as represented by the interrupted lines.

The long ciliary nerves are sensory. The short ciliary nerves contain: sensory fibres (through the sensory nasal root); motor fibres to the irido-constrictor and ciliary muscle (through the autonomic fibres contained in the third nerve); motor fibres to the irido-dilator, and vaso-motor fibres (through the cervico-sympathetic which issues from the cord with the first pair of thoracic roots). The irido-dilator and vaso-motor fibres leave the sympathetic trunk at the base of the brain, join the Gasserian ganglion and are conveyed to the ciliary ganglion through the nasal division of the ophthalmic; or they may come off directly from the cavernous or carotid plexus. Other irido-dilator fibres are said to be derived from the brain-stem through the fifth nerve, passing to the iris through its nasal branch.

The ciliary nerves, long and short, pierce the sclerotic near the optic nerve and course forward between this coat and the choroid. They supply the globe with sensory, motor (to the irido-dilator, the irido-constrictor, and the ciliary muscle), and vaso-motor fibres. The ciliary nerves form a gangliated plexus among the blood-vessels of the choroid, and a similar plexus in the ciliary muscle and the iris.

Regarding the origin of the autonomic (pre-ganglionic) fibres of the third nerve, it was until recently thought that they all came from the anterior part of the third nerve nucleus, which contains smaller cells than the posterior portion. There is, however, little doubt that the nerve-fibres subserving the light reflex (effected through the irido-constrictor), if not those pertaining to accommodation (effected through the ciliary muscle and the irido-constrictor), come direct from the superior colliculus (figs. 24, 25, 30.) The latter receiving, as it does, fibres both from the retina and the visual cortex, can be stimulated from either of these regions. It is also connected with the cervical spinal cord through the tecto-spinal tract, which runs down the tegmentum of the pons and medulla and in the antero-lateral column (fig. 31), to terminate in the ventral horns of the cord.

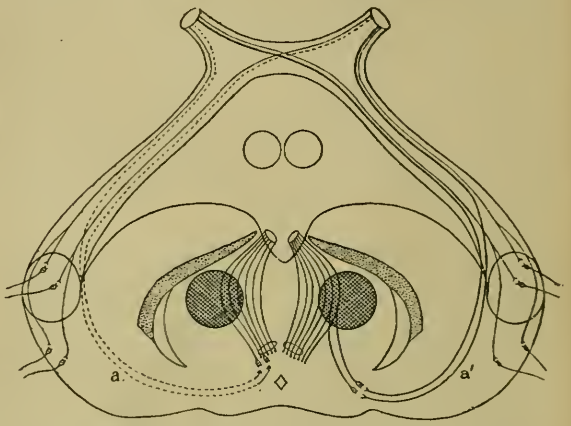

Fig. 30.—The fine retinal fibres in the optic tract can be seen terminating in the corpus genic. ext. and the pulvinar, in which structures a further set of cortico-petal visual fibres arises. The coarser light reflex fibres (a and a') terminate either in the superior colliculus, whence a further set of neurons pass directly into the third nerve, or they terminate in the nucleus of the third nerve.

The Pupils.

In complete relaxation of the iris (*e.g.*, after division of the short ciliary nerves) the pupil is considerably, but not completely, dilated (paralytic mydriasis). If cocaine be applied to such a pupil, further dilation is effected by stimulation of the sympathetic, which causes the dilator fibres to contract (spastic mydriasis). Hence the pupils can be made to dilate, either by inhibition of third nerve activity, or by augmentation of sympathetic activity. Contrariwise, they can be made to contract, either by stimulation of the third nerve (spastic myosis) or inhibition of the sympathetic (paralytic myosis). The action of the third nerve on the irido-constrictor plays the more important part in regulating the size of the pupil.

The fibres of the short ciliary nerves supplying the iris break up within this structure into a plexus containing numerous ganglion cells, endowed with some measure of autonomic control over its musculature. The ciliary ganglion also exercises some control over the muscles of the iris. Thus, Fr.

Frank has shown that while section of the third nerve fibres before their entrance into the ganglion causes incomplete mydriasis, section of the fibres issuing from the ganglion (in the short ciliary nerves) causes complete mydriasis, proving that the ciliary ganglion continues to maintain some tonic contraction of the irido-constrictor after section of the third nerve. Again, stimulation of the short ciliary nerves causes a greater contraction of the pupil than does stimulation of the third nerve.

The action of drugs on the pupil is typified by atropine, eserine, and cocaine. Atropine paralyses, while eserine stimulates, the motor terminals of the sphincter. Cocaine excites the motor terminals of the dilator.

Paralytic mydriasis (paralysis of the third).—The pupil is unaffected by light, accommodation, or convergence. It can be made to dilate through the sympathetic. Atropine, by paralysing the terminals of the third nerve within the sphincter, increases the dilatation; eserine, which stimulates these terminals, causes the pupil to contract; cocaine, which stimulates the nerve terminals of the irido-dilator, increases the dilation.

Spastic mydriasis (stimulation of the sympathetic.)—The pupil contracts in response to light, accommodation, and convergence, although, perhaps, less readily than normally. It fails to dilate further through the action of the sympathetic, *e.g.*, from emotion, cutaneous stimulation, or the application of cocaine. Atropine, on the other hand, increases the dilatation to the maximum by paralysing the antagonising sphincter and allowing the dilator undisputed sway.

Spastic miosis (stimulation of the third nerve).—If the miosis is not maximal, further contraction results from the action of light, accommodation, and convergence. Atropine causes dilatation by paralysing the sphincter. The stimulating action of cocaine on the irido-dilator has no effect on the spasm of the constrictor.

Paralytic miosis (paralysis of the sympathetic).—The pupil, which is only slightly narrowed, does not dilate in response to sensory stimulation of the skin, or psychic influences. It contracts to light, accommodation, and convergence. Atropine causes a moderate dilation, the ample dilation of the pupil produced in the normal eye by this drug being due to the action of the dilator unopposed by the sphincter. Cocaine causes dilation, if the sympathetic terminals in the dilator remain intact. Eserine produces a maximal myosis by inducing spasm of the sphincter.

Normal Variations in the Size of the Pupil.—The size of the pupil varies normally under the following conditions :—

1. Examination of the pupil in a bright light with a magnifying lens shows that it is normally never stationary, but undergoes rapid contractions and dilatations, varying both in rate and amplitude. Loss of this " pupillary unrest " indicates disease. Such loss may precede the occurrence of the Argyll Robertson pupil. This condition is distinct from " hippus," which is pathological.

2. The pupils vary in response to the action of light. Light falling upon the retina causes the pupil to narrow; the shutting out of light causes it to dilate. These effects constitute the light reflex. When light is allowed to fall upon one eye the pupils of both eyes contract, that of the shaded eye the less of the two (the consensual light reflex). Similarly, when one eye is shaded both pupils dilate, the unshaded pupil the less of the two. (An electrical instrument has been constructed which enables light to be thrown suddenly into one eye to the exclusion of the other.) Under bright light (*e.g.*, sunlight) the pupils contract to a pin-point; in complete darkness they tend to dilate fully. The effect of darkness in causing the pupil to dilate is well seen in senile miosis. Though small in bright daylight, the pupils, as evening comes on, dilate. In order to test a pupil which reacts sluggishly to light, the patient should be taken into a dark room and artificial light concentrated upon the pupil by means of a lens. Most pupillary reactions are best tested in a sombre light.

The Light Reflex Arcs.—As to the first and last of the links in this arc, there is no doubt. The initial link is composed of the retinal cones, which, through the mediation of the " bipolars," are placed in relation with certain of the " ganglionic " cells. These give origin to fibres, coarser than the visual fibres, which run in the optic nerves. The final link is formed by the short ciliary nerves coming off from the ciliary ganglion. As to the intermediate link, or links, opinion is still divided.

The Short Arc.—Bernheimer maintains that the retinal fibres, having traversed the optic tract and the white substance of the superior colliculus, pass directly, or after decussation, into the anterior part of the third nerve nucleus, where there arises a further set of neurons sending their axons into the ciliary ganglion. (Fig. 30.)

Bach, however, claims to have shown that the optic nerve fibres subserving the light reflex terminate in the lateral part of the superior colliculus, and that the axons, for the most part decussating, of a further series of neurons pass direct from this structure through the third nerve to the ciliary ganglion without touching the third nerve nucleus. (Figs. 24, 25, 30.)

The Long Arc.—In addition to this short arc there is also, according to this observer, a long light reflex arc; the fibres descend from the external part of the superior colliculus (Fig. 32) to an inhibitory centre in the medulla at the lower level of the calamus scriptorius; from this centre a further set of decussating fibres ascend by the posterior longitudinal bundle, either directly to the third nerve and thence to the ciliary ganglion, or to the third nerve nucleus, whence a further set passes to the ciliary ganglion.

The coarse " light reflex " fibres passing from the retina behave, as regards decussation, like the fine " visual " fibres—*i.e.*, those from the nasal half of each retina decussate in the chiasma, while those from the temporal halves pass direct into the corresponding optic tracts (Fig. 30). Hence hemianopia, due to lesions in the optic chiasma or optic tracts, shows loss of light reflex on the blind halves of the retina. Such loss indicates that the lesion is either in the chiasma or one of the optic tracts (Wernickes' sign). In testing for the hemiopic reaction the difficulty is to confine a pencil of light to the blind portion of the retina. For this purpose a special instrument has been devised. If the light reaches the macular region the pupil necessarily contracts. This region is the most sensitive to the light reflex; thence outwards the sensibility of the retina to the light reflex diminishes.

3. Accommodation consists of a varying contraction of the ciliary muscle leading to a corresponding modification in the convexity of the lens. This lenticular change is attended by an associated modification in the convergence of the eyes and in the size of the pupils. Thus, in directing the gaze from a distant to a near object three things happen: the ciliary muscles contract allowing the lenses to bulge, the axes of the eyes are converged upon the object fixed, and the pupils narrow. Each of these actions is controlled by a separate nervous mechanism, which may be separately disturbed.

They are all, however, under the control of a higher centre which secures their co-ordinated activity. Although contraction of the ciliary muscle is normally attended by a narrowing of the pupil, this is not always the case. Thus, in the spasm of accommodation which so frequently occurs in young people there is no corresponding contraction of the pupil. The act of converging the optic axes appears to be more intimately associated with the contraction of the pupils than the act of accommodation. Thus during voluntary convergent squint the pupils may be observed to contract. Some, therefore, regard this "convergence contraction" as distinct from accommodation contraction. In either case the pupillary contraction must be regarded as an associated contraction rather than as a reflex action.

Accommodation contraction is greater than that produced by the light reflex, unless the light is very bright: even the pin-point pupil of tabes contracts on accommodation.

We are even more in the dark as to the nervous mechanism of accommodation contraction of the pupil than we are as to that of the light reflex. All we can say is, that the autonomic fibres subserving the contraction of the pupil and the ciliary muscle in accommodation run in the third nerve to the ciliary ganglion, and thence by the short ciliary nerves to the globe. It has generally been assumed that the autonomic fibres in the third nerve, controlling both the contraction of the ciliary muscle and of the iris in accommodation, arise in the anterior part of the third nerve nucleus.

Stimulation of the third nerve causes a contraction of the pupil and of the ciliary muscle—*i.e.*, it increases accommodation. According to Morat and Doyon, stimulation of the sympathetic has the opposite effect, not only on the pupil, as is well known, but also on the ciliary muscle.

4. During sleep the pupils undergo extreme contraction, while the cornea moves upwards and inwards.

5. On firmly closing the eyes (as happens when a strong light falls upon them, or on the sudden approach of an object), the pupils contract and roll upwards and inwards. This is a protective reaction. It should be tested in a dull light.

6. The pupils tend to widen on painful stimulation of the skin, especially when the stimulation is made in the cervical region. The dilatation takes place slowly, and sometimes to a considerable degree. It is caused by a reflex stimulation, through the sensory nerves of the skin and the cervical sympathetic, of the irido-dilator. This test is also best made in a dull light.

7. The pupils may alter in size in response to stimuli proceeding from the cerebral cortex: they contract in voluntary convergence and in concentrated attention; they dilate in strong emotion, or as the result of loud noises. It is said that the mere thinking of a bright or a dark object may cause the pupils to contract or dilate. A Hungarian physician is asserted to have been able to dilate his pupils voluntarily.

8. Certain non-visual peripheral reflexes of the pupil are described as taking place through the ciliary ganglion. Such are the pupillary changes resulting from the local action of heat, cold, and electricity. The "orbicularis phenomenon" possibly belongs to this class.

(To be continued.)

The First Lady L.D.S.Eng.

At a meeting of the Council of the Royal College of Surgeons of England, held on December 12th, Miss Lily Fanny Pain, of the Royal Free and National Dental Hospitals, was admitted the first lady Licentiate of the Royal College.

THE PRESENT POSITION AND PROSPECTS OF MEDICAL PRACTICE. (a)

By Sir HECTOR C. CAMERON, F.R.F.P.S., LL.D.,

Emeritus Professor of Surgery, University of Glasgow.

* * * *

You are setting out, gentlemen, at a point of time in the history of the healing art full of good auspices and big with the promise of progress, because its work is now more and more becoming based upon sure and stable foundations. If I contrast its present position and prospects with those it possessed when I became a student of medicine in the early sixties, language can hardly exaggerate the difference. At that time such boast of comparatively recent progress as existed centred around the use of the stethoscope and anæsthetics, but general blood-letting was not yet wholly abandoned, while the use of leeches and other means of abstracting blood locally was a daily routine. Pathology, as a science, was only beginning to be cultivated, and, except in the University of Edinburgh, I question whether in Great Britain there was a professorship or lectureship, and certainly there was no equipped laboratory, established for its teaching. No separate instruction on the subject was given at all in my own University—that of Glasgow—except such teaching as was connected with the making of *post-mortem* examinations and with the demonstration of the gross evidences of disease to be found in different parts of the dead body. The microscope was in the hands of experts, but few students were trained in its use. Then, and for many years to come, the methods of diagnosis, of differentiation between hitherto apparently similar states of ill-health, as well as the means of successfully treating and preventing many formidable and most fatal diseases, which have of late years flowed in so full a flood from the still very young science of bacteriology were, as a matter of course, unknown and undreamt of. The only guides for the physician and surgeon in charge of acute and dangerous illness were the pulse rate, the state of the tongue, and the general aspect and behaviour of the patient, for even the clinical thermometer and the temperature chart were not yet devised. That pedantic word *gynæcology* was still uninvented, and the diseases of women were dealt with almost entirely by the physician with the aid of the drugs of the pharmacopœia. Typhoid was only beginning to be generally differentiated from typhus fever; both were abundant in all large centres of population, and the latter claimed among its victims great numbers of medical practitioners and students, for the subject of Public Health was in its infancy and was neither known, practised nor taught, as we now understand it. Every wound, whether accidental or made by the surgeon, with extremely few exceptions, discharged pus freely; and putrefactive changes occurring in all of them, produced in the atmosphere of every surgical ward, no matter how spacious and well-ventilated, a fœtid sickening odour which tried the student on his first introduction to surgical work more even than the unaccustomed sights of the operating theatre. In every surgical clinique Death held perpetual court, for wound-begotten diseases—hospital gangrene, pyæmia, tetanus, and the rest of that fatal brood, which, thank God, are now to all intents and purposes banished from surgical practice—were never entirely absent, at any time, from the hospitals of that day. No matter how carefully and skilfully an operation was performed, the issue was looked forward to with anxiety and dread. Few of those who did recover did so without serious episodes in their illnesses and disquieting complications of some sort. All suffered from pain and fever, more or less severe, and convalescence was only reached after weeks or months of distressing experiences of many kinds. I have myself, when a student, seen no fewer than five patients suffering from pyæmia which followed amputation for injury, die in the course of one week in a single ward of twenty beds, while other instances of the same disease and of hospital gangrene lay around them. Probably few of you may see more than five amputations of injured limbs during all your studentship—so great has been the progress of conservative surgery—and those which you do see, if only the patients survive the shock of their original injuries, will probably all recover.

(a) Abstract of Opening Address delivered at the Faculty of Medicine, University of Toronto, October 4th, 1912.

For our complete emancipation from the dreadful evils of those dark days of surgery and for no small part of the remarkable advance made also in the domain of the physician, we are indebted to the life and work of that great man, Lord Lister, who died only last February, and whose career has since been commemorated as the boast and the blessing of our profession in every civilised land and nowhere more heartily and warmly than in this city of Toronto. Great in character, as well as in achievement, he will ever remain an exemplar for all of us; and I feel inclined to suggest to you one or two lessons—we have no time for more—to be derived from facts in his life, lessons which may have special interest for you now and may be of value hereafter. And first, I should like to recall and relate to you a little chapter of medical history, which concerns him and must always be of interest to every teacher and student of clinical medicine, surgery and midwifery.

I have indicated to you the awful mortality which occurred in surgical hospitals at the time of which I have been speaking. Equally appalling was that to be met with in all maternity charities. At least one other than Lister was working actively and earnestly, although in a very different direction, with a view, if possible, of furnishing a remedy. I refer to the late Sir James Simpson, the celebrated Professor of Obstetrics in the University of Edinburgh.

He had been long struck by the great maternal mortality then prevalent among the patients of lying-in hospitals, as compared with that which obtained in the case of women delivered in their own homes; and knowing how analogous were the circumstances of the newly-emptied uterus with that of the newly-inflicted wound, and how similar were the dangerous and often fatal sequelæ of each, he was prepared to find a like disproportion between the number of deaths of those operated on in private practice and those treated in what he spoke of as "palatial hospitals." It was the unfavourable environment, therefore, of the patient which he regarded as the real cause of disaster, and it was the practice of collecting together many wounded persons under one roof which he set himself, with all his accustomed energy, to denounce and, if possible, to alter and supersede. He wrote and spoke on the subject with the frequency and force of an earnest agitator, so that much attention was aroused by his views and not a few influential converts adopted his creed. In a pamphlet entitled "On Our Existing System of Hospitalism and Its Effects," he wrote as follows:

"Above twenty years ago, in speaking of the effects and evils of our large hospitals—as these hospitals are at present constructed—I took occasion to remark: 'There are few or no circumstances which would contribute more to save surgical and obstetric patients from phlebitic and other analogous disorders than a total change in the present system of hospital practice. I have often stated and taught that if our present medical, surgical, and obstetric hospitals were changed from being crowded palaces—with a layer of sick in each flat—into villages of cottages with one or, at most, two patients in each room, a great saving of human life would be effected; and if the village were constructed of iron—as is sometimes done for other purposes—instead of brick or stone, it could be taken down and rebuilt every few years—a matter, apparently, of much moment in hospital hygiene.' Since the date mentioned," he continued, "I have conversed on many occasions with many medical men on this subject. I have found, however, that to most professional men it seemed to be altogether a kind of medical heresy to doubt that our numerous and splendid hospitals for the sick poor could by any possibility be aught than institutions as beneficial in their practical results as they were benevolent in their practical objects. When acting in 1867 at Belfast as President of the Public Health Section of the National Association for the Promotion of Social Science, I spoke on the subject of Hospitalism at some length in my Inaugural Address, and propounded the questions—to what extent are hospitals, as at present constructed, banes and blessings? and, how can they be changed so as to convert them from the former to the latter? I conclude my remarks on this point by again suggesting publicly that to render our hospitals as healthy and useful as possible, and in order to acquire sufficient space and air and isolation for their sick inmates, they should be changed from wards into rooms, from stately mansions into simple cottages, from stone and marble palaces into wooden, or brick and iron cottages. On the same occasion, after speaking of the relative treatment of some diseases such as fevers, etc., in and out of hospitals, and after showing—chiefly from the large statistics of Mons. Lefort—that as a general rule, parturient women recovered in a much larger proportion when delivered in their own homes than when delivered in lying-in hospitals, I proceeded to ask: 'In regard to surgical patients in hospitals, does the same law hold good as in respect to obstetric patients? At the present time medical science is, I believe, in want of any sufficient data to determine the question. The general mortality in hospitals after operations is confessedly very great, far greater than was believed a quarter or half a century ago, when no sufficient statistics had been collected on the matter. The man laid on an operating table in one of our surgical hospitals is exposed to more chances of death than the English soldier on the field of Waterloo. Some authors have collected on a large scale the statistical results of some operations and particularly of amputations of the limbs. Out of 1,656 cases of amputation performed in the hospitals of Paris and collected by Messieurs Malgaigne and Trelat, 803 died, or nearly one in every two. Dr. Fenwick has collected together from various sources 4,937 cases of amputations of the limbs. Of these, 1,562 died, or nearly one in every three or four. "The assertion," observes Dr. Fenwick, "that one person out of every three who suffers an amputation perishes would have been repudiated a few years ago as a libel upon the profession, and yet such is the rate of mortality observed in nearly 5,000 cases." Are the results of amputation," in conclusion asked Sir James Simpson, "in dispensary, private or country practice as deplorable? Adequate data have not been collected. Certainly the general belief of the profession is that in country practice amputations are not so frightfully fatal."

In order to settle this point, if possible, he collected extensive statistics of the results of amputation in rural practice. These he obtained by addressing a circular letter, with an accompanying schedule to a great number of medical men practising in the provincial and rural parts of England and Scotland, requesting them to furnish him with the results of the limb amputations which had been performed by them in their private practice. The returns obtained from these applications numbered altogether 2,098 cases of amputation. The total number of deaths was 226, *i.e.*, one in every 9.2 died or 10.8 in every 100. He compared with this mortality that of a similar number of limb amputations performed in the Royal Infirmaries of Edinburgh and Glasgow, and in nine of the leading London hospitals. In these 2,089 limb amputations performed in eleven great hospitals by surgeons of skill and experience he found that no fewer than 855 had died, *i.e.*, 1 in 2.4. In other words, almost one half of the patients operated on died. Simpson concludes his pamphlet thus:—

"This excess in about 2,100 limb amputations, of 629 deaths in hospital pratice as compared with our rural villages and cottages; in large wards as compared with isolated rooms, is certainly much greater and more pronounced than I myself expected when I began the present inquiry. But must the calling of this dismal death-roll go on unchallenged and unchecked? Shall this pitiless and deliberate sacrifice of human life to conditions which are more or less preventable be continued or arrested? Do not these terrible figures plead eloquently and clamantly for a revision and reform of our existing hospital system?"

The pamphlet from which I have thus freely quoted was published and scattered in great profusion and in all directions in the spring of 1869, and if it did not succeed in bringing about the reform of hospitals which its author desired, it was not because he died only a year after its publication. There were many ardent disciples who would gladly have carried on the propaganda. But happily, the difficulty was to be solved in a very different way. Just after leaving Glasgow in 1869, and only a few months before Simpson died, Lister published a paper entitled "On the Effects of the Antiseptic System of Treatment upon the Salubrity of a Surgical Hospital." His first experience as a hospital surgeon began in the Royal Infirmary of Glasgow, at that time one of the most unhealthy of hospitals; but, ere he left it, the effects of his new treatment on the health of the wards was manifest to all who witnessed them. As he himself declared, that treatment was in the highest degree beneficial, converting the wards from some of the most unhealthy in the kingdom into models of healthiness.

* * * *

How amply his anticipations have been fulfilled is probably known to all of you. The very word "hospitalism" died an early death and has entirely dropped out of medical literature. Our splendid opportunities of successfully prosecuting clinical practice, research and instruction have by Lister's discoveries been more than fully preserved to us. It requires no great power of imagination to realise how entirely they would have been destroyed and lost by any scheme which scattered our patients over many roods of ground and housed them in camps or villages of two-roomed cottages. Instead, fortunately, they are still accommodated and compactly housed in flats even more numerous than Sir James Simpson ever saw, and with even larger "layers of sick" on every floor. No outcome of the antiseptic system of treating wounds occasioned Lister more pleasure and pride than this one. The Royal Infirmary of Glasgow, in which he had such unhappy surgical experiences when he joined its staff in 1861 has yielded almost from the time he left it until its recent reconstruction, although composed of the same walls and floors as in his day, as good results as any other hospital in existence. He himself had always practised in very old hospitals and operated in theatres of old-fashioned construction, but he knew that he could depend on securing the best results in his wounds; and so he proved the fact that it was not necessarily change in the environment of the patients, but the avoidance of sepsis in their wounds, which was required to ensure salubrity and a low death-rate in surgical hospitals. To that discovery you owe the continuance of your splendid and convenient opportunity of clinical study. You owe also a sense of gratitude to the memory of the man who made the discovery in the face of much hostile and often bitter criticism and at a most serious crisis in the history of hospital administration and construction.

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In the introductory address which Lister delivered to the students of Edinburgh on "The Causation of Putrefaction and Fermentation," when he entered there upon his duties as Professor of Clinical Surgery, in the winter of 1869, he concluded in the same strain of confidence to their ability to draw just conclusions in matters of fact. "I commend these facts," he said, "to your candid and impartial judgment, beseeching you to form your own opinion regarding them. The minds which you bring to bear on this subject to-day are very much the same as they will be throughout your lives. An observation which any one of you may make now will serve, in after life, to illustrate a course of lectures, should he occupy a position corresponding to that which I have now the honour to hold. And you are as competent as you ever will be to draw logical conclusions from established data. Do not let any authority shake your confidence in knowledge so obtained."

* * * *

But it is a struggle in which something more is needed for success than accurate knowledge and wise skill. The practitioner must recognise that a high moral standard of conduct is required of him. It is difficult to convey, in a few sentences, what such a standard should be. I once made the attempt to indicate this to an audience much the same as that which I have now the honour to address and, perhaps, I cannot do better than repeat to you the words I then used. "The practitioner of medicine," I said on that occasion, "however ably he cultivates both its science and art, will fall far short of its highest ideal unless he also tries to illustrate, in his daily round, what one may call, for want of a better term, the moral side of his profession. To devote himself to a daily and often self-denying personal service of the sick; to render that service truthfully, soberly and chastely; to resist all temptations to self-advertisement and the depreciation of rivals—for the depreciation of others is only another form of self-approbation; to be silent in regard to much of what he sees and is told in the houses into which he enters; to be chivalrously regardful of the modesty of women, sympathetic with the easily-aroused fears of little children, and patient with all manner of men; to feel on many an occasion much more anxiety than he shows; not to be untruthful to the sufferer from hopeless disease, and yet to remember, as Sir Thomas Browne, himself a physician, has said, that 'it is the heaviest stone that Melancholy can throw at a man to tell him that he is at the end of his being'—these, and many other difficult duties and acts of self-discipline like these, are incumbent upon every medical practitioner."

Gentlemen, the ideal of conduct such as I here endeavour to indicate is far from being easy of attainment, and there are few of us, perhaps, who completely and adequately fulfill its requirements. But all its essentials may be learned and practised even during your student life. The formation of your character is in process as surely as is your acquisition of knowledge, and in wishing you all success in your work here and hereafter, I conclude by impressing upon you that he who faithfully pursues his studies now, who gradually acquires skill by the fusion of his knowledge with his growing experience and who guides all by a high ethical standard in respect both of his patients and of his professional brethren is the man who, in the struggle of the coming years, will be found amidst the sunshine and hope of the van and not amidst the dust and fatigue of the rear.

THE TRIUMPH OF QUACKERY.

By HENRY SEWILL, M.R.C.S.

A year or so ago I expressed the opinion that the case for medical law reform was overwhelming, and needed only to be stated in an unimpeachable fashion to render certain the attention and intervention of Parliament. I had for a long time urged continually that the case could be set out in the desired manner in one way alone, namely, through the medium of a Royal Commission, charged to report not only upon unqualified practice, but upon the traffic in quack medicines and appliances—a traffic which has always formed the cloak for a vast amount of illegal practice. I now repeat the deliberate opinion which I quite recently put forth, and about which I am asked by one of your correspondents for further information—namely, that the prospects of medical law reform are for the present completely destroyed.

My changed attitude has been brought about by events during the past two or three years. During this time it has been shown that there exists a considerable section of the profession that upholds quackery, both in the form of practice by unqualified pretenders and the sale of quack medicines. It has been proved that qualified men can always be found to take positions as partners, assistants and supporters of quacks, however fantastic their claims, and that many of these men before the Medical Council and in the law courts are ready to testify to their belief in the *bonâ fides* of their associates, and in the efficacy of their methods and remedies.

Some of these men are no doubt fully alive to the character of the enterprises to which they lend themselves. This is from time to time clearly brought out before the General Medical Council, when the names of offenders are struck off the Register for "infamous conduct in a professional respect." This penalty has, however, no terrors for these men. They can go on practising as before, and can still assume the titles of which they have nominally been deprived. On the other hand, it is certain that many practitioners become more or less closely associated with quackery, even of the most blatant quality, in pure ingenuousness. These men are not to be blamed. They are the product of a faulty system of medical education and examination. After years of attendance at a medical school, they remain virtually uninstructed in the fundamental facts of science, and unenlightened as to the methods of scientific reasoning. They do not recognise that in a question of treatment an indisputable diagnosis is the first indispensable requirement; they do not perceive in a question of therapeutics the glaring pitfalls which beset the way in a *post hoc, propter hoc* line of reasoning. With a simplicity equal to that which marks the uninstructed public, these practitioners show themselves willing to accept the word of the nostrum-monger for the efficacy of his wares, and, having administered these concoctions in cases the nature of which has not been scientifically established, they are ready to testify confidently that an apparent improvement or cure has been brought about by the use of medicaments which could have been easily proved by analysis to contain no agent capable of causing physiological reaction of any kind.

This attitude of legally qualified men has had a great effect upon the newspaper Press. Many leading papers have up to now been defenders of scientific medicine; many of them have on every suitable occasion denounced quackery and all kinds of questionable practice. These powerful journals have now mostly altered their position and tone. They obviously argue, that if quackery is capable of affording relief where orthodox medicine fails; if secret remedies may contain ingredients unknown to science and capable of curing diseases which "orthodox" medicine regards as hopeless; and if these facts are testified to by a cloud of lay and skilled witnesses, they, the newspapers, are not called upon to decide, and have no right to exclude from their columns medical advertisements of any description. Some papers are already going further. They are espousing the cause of quackery and holding up as martyrs men whose names have been struck off the *Medical Register* for associating themselves with it. And it must be remembered that the papers are dividing between them an income of not less than £2,000,000 a year from quack advertisements. A great number of papers are owned by companies, and their business managers are not likely for sentimental reasons to deprive their shareholders of dividends to be gained by any means which, at least from the view of commercialism, seem perfectly legitimate.

The appointment of a Select Committee on Patent Medicines has rendered extremely remote the setting up of a Royal Commission. A Royal Commission has power to compel the attendance of witnesses and examine them on oath. A Select Committee's powers are comparatively limited; its report must prove to a like degree inadequate. If, however, legislation from this or any other source be recommended, it will be next necessary to gain the active support of the Government, and to find a statesman both able and willing to study the subject and take charge of the Bill. The days are long past when a private member could introduce and carry such a measure. Legislation would be strenuously opposed by the great bulk of the newspaper Press, and by its representatives in both Houses; by the quacks and owners of quack remedies—wielders of an income of some millions a year and having also backers in Parliament; it would be fought against by the various parties that hate science in general and medical science in particular, as, for example, the anti-vivisectionists and the anti-vaccinationists—all represented in Parliament. All these opponents would use the facts and arguments in support of "free trade" in medicine, which have latterly been so abundantly furnished from many quarters, including the section of qualified medical men to which I have already alluded. In view of all these considerations, it must appear extremely unlikely that any Government will, under present conditions, undertake the task of medical law reform, and virtually impossible that a satisfactory measure can be placed upon the Statute Book.

In consequence of judgments in the High Courts, confirmed by the House of Lords, the penal clauses of the Medical Acts have been reduced to a dead letter, and there remains no power to prevent quacks from assuming the title of "doctor" and palming themselves off as qualified men in any department where profitable fraud can be most easily carried on.

We are now witnessing what is only the beginning of a great boom in quackery. Quackery provides, at the present day, perhaps the safest of all fields for cynical knavery. It is only the most stupid of quacks who can put himself within reach of the law, whereas a City shark or swindler stands in constant danger of a criminal charge. Quackery affords large incomes to great numbers of vulgar impostors, and vast wealth to many clever adventurers, and is, therefore, becoming more and more attractive to these classes. The Stamp Duty returns show that the sum spent on quack medicines increased from £2,764,557 in 1907 to over £3,500,000 in 1911. It is not necessary to suggest that they are all alike worthless, and that none is efficacious for the purpose for which it is offered. It is enough to state that only a small percentage of these remedies has any value whatever. If the money spent on worthless apparatus and the incomes of unqualified practitioners be roughly guessed, an approximate estimate may be made of the gigantic sum which is annually taken out of the pockets of the simple public. As I have often repeated in previous writings, unqualified practice and the quack medicine trade are not only in the greater part fraudulent, they are cruel and deadly. They give rise to a vast amount of avoidable suffering; they lead to a large preventable mortality. Evidence of this can be found abundantly in every hospital, and can be furnished by every practitioner of sufficient experience. The injury is mostly brought about through reliance upon worthless remedies in cases which are amenable in an early stage to treatment, but which soon pass, if neglected, into an incurable or mortal phase. The injury may be comparatively slight, as, for example, when a case of simple alopecia runs on to complete baldness, whilst trust is being placed in a magic hair-grower. On the other hand, similar delay may condemn the patient to a lingering death, with unspeakable torment, easily preventable by early scientific treatment, as when a heal-all ointment is employed as a remedy for cancer or lupus. Direct injury from quack remedies is not so frequent, but is sufficiently common. It is, for instance, difficult to estimate the injury to health now being caused by sham tonics containing large doses of alcohol. Hundreds of thousands a year are being spent in the advertising of these poisonous compounds—a measure, at least, of their consumption by the simple public.

Every quack enterprise is now being stimulated, and the people, especially the less educated classes, are being led more and more to take the appearance of quack advertisements in high-class journals as a voucher for the good faith of the authors. The simple, confiding masses will be the worst sufferers from the prevailing medical anarchy. The effects upon the profession will be various. From the sordid point of view doctors will not lose much. Quackery causes widespread injury to the public health; the majority of its victims, with maladies created or aggravated by wrong methods, gravitate sooner or later into the hands of qualified men, and thus money which otherwise would not have been earned falls into the pockets of the profession. On the other hand, quackery involves depreciation of medical science and disparagement of its votaries, and the vast increase of advertising must have its effect in this direction at least upon the ignorant reader. And again, the significance of the association of qualified men, either innocently or consciously, with quackery will be recognised by people of higher education, and their respect for the profession must be surely diminished. The distrust thus engendered will hurt most seriously the average general practitioner.

If it is to be classed among the minor evils afflicting latter-day society quackery must be reckoned among the greatest of these, whilst the association with it of the bulk of the newspaper Press—the self-appointed censors of morals, protectors of the people, guardians of the national honour—must be regarded as one of the most shameful and lamentable scandals of the present day. It seems to be clearly the duty of the profession on humanitarian grounds alone, and in spite of misrepresentation or calumny, to keep up the fight against quackery. Medical men alone know the facts; they alone are able to collect and marshal them and force them into notice. For the time a check is being felt—quackery has gained a temporary triumph. The situation can, I believe, be retrieved by resolution and perseverance; but, as this article is already long enough, further discussion must be reserved for a future communication.

OPERATING THEATRES.

ROYAL FREE HOSPITAL.

Stricture of Urethra—Retention of Urine—Wheelhouse's Operation.—Mr. Willmott Evans operated on a man, æt. 47, for stricture of the urethra. The patient had suffered for many years from difficulty in micturition caused by a stricture, and on one previous occasion he had had retention of urine. A fortnight before admission into the hospital, after he had been drinking freely, the difficulty of micturition had greatly increased, but still he had succeeded in passing water after much straining. Two days before admission he found that he was unable to pass any urine at all, and after suffering great pain he came to the hospital. Attempts were made to draw off the urine, but the catheter could not be introduced, as it was arrested about an inch in front of the membranous urethra. As the pain was great, the house surgeon aspirated the bladder by passing a fine hollow needle above the pubes. Nearly two pints of urine were drawn off. It was cloudy and alkaline in reaction. He was given a saline purgative and was kept in bed. The purgative acted well, but he was unable to pass any urine by the urethra, and in the evening of the day after admission it was found necessary to evacuate the contents of the bladder once more supra-pubically. Mr. Evans decided to perform a Wheelhouse operation; so the next morning the patient was anæsthetised and placed in the lithotomy position. The perinæum was shaved and painted with 2 per cent. solution of iodine. A straight Wheelhouse staff was introduced into the urethra as far as the stricture and was held in that position by an assistant, and a scalpel was passed through the tissues of the perinæum so as to enter the groove about half an inch from the stricture. The staff was turned round so that the hook caught the anterior angle of the opening. A fine silk stitch was placed in each edge of the wound, and these were drawn sideways, so that a diamond-shaped opening was formed, through which a fine probe-pointed director was passed, and after a little searching it was found possible to insert the director in the stricture, and it was then passed backwards into the bladder. The point of a knife was inserted in the groove of the director and with it the stricture was completely cut through. As the probe-pointed director was withdrawn a probe-pointed gorget was passed in its place backwards into the bladder. A soft rubber catheter was introduced through the meatus and brought out through the perinæal wound, and then the point was re-introduced and passed backwards along the groove of the gorget until it entered the bladder, and that it did so was shown by the escape of urine along the catheter. The catheter was tied in position, and gauze dressing was applied to the perinæum, the wound being left unsutured.

The patient was returned to bed, and by means of a piece of glass and rubber tubing the urine was conducted to a bowl under the bed.

Mr. Evans said there are certain strictures which need operative treatment, though most strictures of the urethra can be cured by means of one or other form of dilatation. When, however, the surgeon has to deal with retention of urine combined with a stricture that will not readily admit the passage of a catheter, however small, it is advisable to relieve the retention and at the same time to cure the stricture, and especially is it desirable in those cases in which there is a long history of difficulty of micturition, for in such cases there will certainly be a good deal of dilatation of the bladder, of the ureters, and of the pelves of the kidneys, while the kidney substance will have undergone a fibrous change which will have interfered in no small degree with the excretory powers of the organs. In such circumstances the kidneys are very intolerant of interference with any part of the urinary system, therefore any attempt to cure the stricture should give complete ease of micturition so as to relieve the over-pressure which has been existing in the urinary tract. In his opinion no operation more completely fulfilled these requirements than that devised by Wheelhouse. It is not difficult of execution, but care should be taken not to make the common mistake of opening the urethra too close to the stricture. It is essential that the opening into the urethra should be made where the urethra is normal, and not where its shape had been altered by scar tissue.

The patient rapidly improved, the urine drained freely through the catheter, and the perinæal wound closed steadily until, about three weeks after the operation, it was almost healed, and a few days later the catheter was permanently withdrawn; but every other day for another week, a gum elastic catheter was passed, and the patient was told that he must attend regularly, at first once a week, later once a fortnight, and later still once a month, in order to make it certain that the stricture was not reforming.

TRANSACTIONS OF SOCIETIES.

ROYAL SOCIETY OF MEDICINE.

Clinical Section.

Meeting held Friday, December 13th, 1912.

The President, Sir Wm. Osler, in the Chair.

DEMONSTRATION OF CASES.

Dr. A. M. Gossage showed a case of Obstruction of the Superior Vena Cava. The patient, a man, æt. 74, was admitted into the hospital for general malaise. He had had syphilis in his youth, and later had had a gumma on the left upper arm, where there was a scar adherent to the bone. The enlargement of the veins of the trunk had been noticed for the past twenty years. Except that he was rather feeble there was no impairment of his health, and he did not suffer from dyspnœa on exertion. On examination there was no enlargement of the heart and no murmurs The radial arteries were not materially thickened, being remarkably good for his age. The maximum blood-pressure in the brachial artery was 140 mm. Hg. Over the front of the thorax and abdomen were several chains of enormously enlarged and tortuous veins, extending as high as the second ribs, the largest being on the right side. The blood flow in these veins was from above down and they disappeared at the groins. There were no veins at the back of the thorax. The veins of the lower limbs were varicose, and here, of course, the flow was upwards. There was no swelling or congestion of the face or upper limbs, though the brachial veins were rather prominent. X-ray examination showed no abnormal shadow in the thorax.

The case seemed to be one of occlusion of the superior vena cava, probably due to cicatricial contraction after a gumma in the upper part of the thorax. The enormous enlargement of the veins evidently allowed a free return of the blood from the upper part of the body by way of the inferior vena cava, and explained the absence of the usual congestion of the face and arms when the superior vena cava is blocked.

Mr. Ralph Thompson showed two cases of Prostatic Calculi, with skiagram.

Case I.—A man, æt. 67. At the end of November, 1911, examination with a sound revealed a stone; it was apparently felt with the shaft of the instrument, the beak of which was free in the bladder. Rectal examination showed the stone in the region of the prostate. An operation was done by the perineal route in front of the transversus perinei on December, 1911; the capsule of the prostate being incised and the stone removed, the wound healed well; weight of the stone, 32.5 grm. Composition of the stone: one large and three small facetted pieces. The skiagram was important as showing the surface markings of the prostate, and the position of the prostatic stone. The patient appeared perfectly well.

Case II.—A man, æt. 73. He was admitted for difficulty in passing water on October 30th, 1912. Catheters passed with some difficulty. Suprapubic cystotomy under spinal anæsthesia was done. After operation, some difficulty was experienced in passing catheters occasionally, not always. On November 10th a stone was felt in the region of the prostate with a conic catheter and sound. A skiagram revealed three prostatic calculi lying behind the pubes. Nothing was felt *per rectum* except a very hard prostate. On November 20th he died. *Post mortem:* A double aortic aneurysm was found, the bladder, prostate and urethra were removed for examination and exhibition.

Dr. F. Parkes Weber showed two cases of Family Cerebellar Ataxia in two half-sisters.

Case I.—A well-grown but somewhat mentally deficient girl, æt. 15. She was backward in learning to walk, and her mother said that she never was able to speak distinctly. At the age of six she could not walk and run as well as other children of her age, and tended to fall forwards when excited or if she tried to go too fast. About Christmas, 1908, increasing tendency to fall was observed, and she sometimes had to support herself with her hands when standing. She often complained of headache, and sometimes vomited. In May, 1909, when she first came under Dr. Weber's observation at the hospital, there was decided unsteadiness in gait, especially noticeable when she tried to walk along a marked-out line and when she turned round suddenly. Occasionally there was tremulousness in the limbs and head. No definite Romberg's symptom. Her mother thought that her gait afterwards improved somewhat. In November, 1912, she walked slowly and somewhat unsteadily, placing her feet rather too far out sideways. She tended to "totter" when turning round quickly. Romberg's sign was negative. Patellar, Achilles, plantar, abdominal, and pupillary reflexes were normal. There was occasionally fine horizontal nystagmus on looking to right or left. No muscular wasting; no anæsthesia; no "pes cavus"; no deformity of the vertebral column. Her speech was slow and monotonous. She was clean in her habits. Nothing abnormal in the thoracic or abdominal organs, or in the urine. The Wassermann reaction for syphilis was negative with the patient's blood serum. The hearing was good. Nothing abnormal was seen by ophthalmoscopic examination.

Case II.—A well-nourished but somewhat mentally defective girl, æt. 4, half-sister (by her mother) of the first patient. She was said to have begun to speak when aged 2½. She used to get about, her mother thought, like other children of the same age. In November, 1911, she had a sore throat, and in January, 1912, she was brought to the German Hospital out-patient department because she had almost lost the power of walking. At that time her knee-jerks were found to be normal. In February, 1912, she could walk about, but with a paretic-spastic gait, and the knee-jerks were excessive. After that improvement was said to have occurred, but in July the child had an attack of follicular tonsillitis with fever, and the gait became worse again. When admitted to the German Hospital (July 15, 1912) the child could not walk or stand without support. Her gait was of an unsteady, paretic-spastic type, and she preferred to place her feet a good deal apart when standing up. There was evidently some deficiency in the balancing power. Marked tremulousness occurred in the upper and lower extremities when walking; the movements of the upper extremities were rather slow and showed no marked ataxia. The knee-jerks were readily obtainable, and were, if anything, rather excessive. The plantar reflexes were of the extensor type in both feet. The pupillary reflexes were normal, and there was no nystagmus. Ophthalmoscopic appearances were normal. The child spoke very little, and only in a slow, monotonous way. No muscular atrophy; no definite signs of rickets. Nothing abnormal in the thoracic or abdominal viscera. Since July there had been some improvement, and the plantar reflexes were found to be of the normal flexor type, when tested at the end of September.

In both the actual ataxia was very slight. In the eldest patient the chief symptom was the tendency to "totter" on walking and turning round sharply. In the second case the spasticity of the gait and the presence of Babinski's phenomenon in July pointed to involvement of the cerebral motor cortex as well as of the cerebellum, the symptoms being those of what one might term a mild cerebro-cerebellar diplegia.

No history of nervous disease in other members of the family can be obtained, but the subject was rather difficult to investigate, as the mother, a healthy-looking and apparently mentally normal woman, aged 41, had had children by three different men.

Dr. F. Parkes Weber also showed a case of bilateral cervical ribs with unilateral (right-sided) atrophy of hand muscles. The patient, æt. 21, was a well-built young woman. Four years ago she fell on her right side; she noticed nothing specially wrong till a year later, when she began to suffer from pain in the right upper extremity, and there was some wasting in the right hand. The pain was of a "burning character," passing from the right shoulder along the inner and back part of the arm to the elbow and down the ulnar side of the forearm to the wrist and ulnar side of the hand. This pain, though not always present, had troubled her on and off since then, and lately she had likewise had pain of a more biting character on the ulnar side of the affected hand. The wasting in the right hand had somewhat increased since it was first observed. She said that when she was exposed to cold weather her right hand was more numbed and bluer than her left hand, but she did not think her right hand became definitely weaker in cold weather. When shown there was marked atrophy of the intrinsic muscles of the right hand; it was seen in front of the thenar and hypothenar eminences and at the back in the region of the interossei muscles between the metacarpal bones. The distal part of the right forearm appeared slightly smaller than the corresponding part of the left upper extremity. The dynamometer grasp was 7½ in the right hand against 15½ in the left hand (the normal grasp by the dynamometer in question would be about 15 to 20). Electrical examination with the galvanic current showed that ACC was greater than KCC in the muscles of the thenar eminence of the right hand, whereas in the corresponding muscles of the left hand KCC was greater than ACC. There was no anæsthesia or hypo-æsthesia in the hand and forearm of either side. Skiagrams showed that the patient had a small seventh cervical rib on each side, though these could not be felt by palpation in the neck. Nothing else abnormal had been detected in regard to the patient, except that from childhood she had had slight "dysarthria" in regard to the pronunciation of certain consonants. The brachial systolic blood-pressure was slightly greater on the affected side than on the unaffected. There was no scoliosis and no abnormality in regard to sweating, pupillary reactions, or tendon reflexes, and, when she was not exposed to cold weather, there was no difference in colour and temperature between the two hands.

Symptoms due to seventh cervical ribs were commoner in females than in males, and usually first showed themselves about the time of puberty, as they did in the present patient. When, in cases of bilateral cervical ribs, the symptoms were only unilateral, Dr.

Weber believed that they were usually (as in the present case) on the right side. The slight dysarthria (defect in the pronunciation of certain consonants) observed in the present case represents a faulty development in an important function, which might be compared with faulty developments in structures of the body (such as the development of cervical ribs), since they both belonged to the class of abnormalities which had sometimes been included as "stigmata of degeneration." An occasional association had been claimed for cervical ribs with other malformations (Oppenheim), such as the presence of medullated nerve-fibres in the retina, and also with various "degenerative" nervous diseases, amongst which might possibly be classed Graves's disease and syringomyelia. On the other hand, cervical ribs were not very rare, for they often gave rise to no symptoms (so that their presence was not inquired into by Röntgen-ray examination), and the association might be a chance one. Moreover, symptoms connected with cervical ribs might occasionally have been supposed to indicate the presence of syringomyelia, when the latter disease was not really present.

Dr. F. Parkes Weber also showed a case of cervical ribs with atrophy of hand muscles. The patient, æt. 16½, was a well-nourished girl, who first came under Dr. Weber's attention when she was aged 13, for symptoms suggesting the presence of seventh cervical ribs. The symptoms were almost entirely confined to the right upper extremity. There was decided wasting of the thenar, hypothenar, and inter-metacarpal regions of the right hand. The right hand was weaker and usually felt colder than the left hand. Exposure to cold made it still weaker, and it more readily became numbed than the left hand. The dynamometer grasp in the right hand was 5, and in the left hand 15 (the normal grasp by the dynamometer in question would be about 15 to 20). Electrical examination by galvanism showed reaction of degeneration in the muscles of the thenar and hypothenar regions of the right hand. There was decided hypo-æsthesia on the ulnar side of the right upper extremity, notably in the hand. A skiagram showed the presence of a small seventh cervical rib on each side, but the one on the right side was the bigger of the two. Neither of them could be detected by ordinary palpation. The wasting in the hand muscles had been observed during the previous two or three months only, but pain of a sharp, shooting character in the right upper extremity had been occasionally complained of for the last two years. The knee-jerks and Achilles-jerks were normal. In this case the symptoms due to cervical ribs first attracted attention, as usual, about the period of puberty, for menstruation commenced when she was aged 13.

The right seventh cervical rib was removed by Dr. E. Michels on May 14th, 1909, and since then the patient had never had the peculiar pain she complained of in the right upper extremity. After the operation, however, she at first lost power in her right hand. This gradually returned, until the dynamometer grasp (the same dynamometer used as previously) with her right hand was 11, against 26 with her left hand. There was still much wasting in the intrinsic muscles of the right hand, and her weakness caused difficulty in writing, etc., for she had not become left-handed. The electrical examination with galvanism showed that ACC was greater than KCC in the muscles of the thenar and hypothenar regions of the wasted hand. During exposure to cold the right hand still became more readily numbed than the left hand, and there was still decided hypo-æsthesia over the ulnar portion of the right wrist and hand, including the fourth and fifth fingers. Before the operation the patient was shown at the meeting of the Medical Society of London, on April 26th, 1909. A skiagram of the neck showed the appearance after the operation.

Mr. Philip Turner showed a case of sarcoma of foot. The man, æt. 72, first noticed a swelling of his right foot 34 years ago. He said that it appeared after an attack of rheumatism. Though slowly increasing in size, it gave him no particular trouble until recently, when the enlargement had been more rapid. Two months ago the skin at the posterior part gave way, and the resulting ulcer had never healed. There was a large tumour, the maximum length of which was 4 in., situated at the posterior part of the sole and the outer side of the right foot. Posteriorly there was an ulcerated surface the size of half-a-crown, from which a fungating mass protruded. The tumour was elastic in consistency, and appeared to be adherent to the os calcis. Radiographic examination, however, showed this and the other tarsal and metatarsal bones to be unaltered. There was a small area of ossification near the centre of the tumour.

Dr. W. Essex Wynter, M.D., and Mr. John Murray showed a case of subcutaneous drainage for ascites. The patient, a woman, was admitted on August 30th, with a history of peritonitis and colic nine years before, followed by enlargement of the abdomen. She had attended the out-patient department for three months on this account, increase in the size of the liver and spleen being noted. She had suffered with symptoms referred to the liver for three years, with occasional diarrhœa, vomiting and hæmatemesis, and had been losing weight. There had also been complaints of numbness and loss of power in the hands, with shooting pains in the legs. She was thin, with earthy complexion and stigmata on face, the knee-jerks were feeble, and there was some arterial degeneration. On September 17th, the abdomen being very tense and respiration hampered, 9 pints of fluid were withdrawn; measurement, 34¼ in.; the enlargement of the liver and spleen being then obvious. Fluid rapidly re-accumulated, and by October 10th she was tenser than before; measurement, 35½ in. On October 18th an incision was made in the mid-line below the ensiform cartilage, and a decalcified bone tube inserted into the peritoneal cavity, its free end being buried in the parietes. The skin was then sutured over it. The hob-nailed surface of the liver was felt, leaving no doubt as to cirrhosis, some fluid escaped, and considerable leakage occurred afterwards. Owing to delay in healing, and the occurrence of some suppuration, the bone tube was withdrawn 14 days later. Measurement, 26½ in. Temperature throughout ranged from 97° to 100° F. Fluid had not re-accumulated.

Dr. R. Hutchison showed a case of Hirschsprung's disease. This patient was shown at the last meeting, and was exhibited again to show the result of treatment by brine enemata. The abdomen had become quite flat.

Dr. A. F. Hertz showed a case of organic hemiplegia following typhoid fever, in which the plantar reflex was flexor, but Babinski's "second sign"—combined movement of the trunk and pelvis—was present. The man, æt. 31, had typhoid fever in 1902. At the end of the second week of his illness he woke one morning to find that the left side of his face and his left arm and left leg were paralysed. The paralysis diminished for a time, but after some months no further improvement occurred.

There was, when exhibited, very little evidence of facial paralysis, and the arm had recovered most of its power. The left leg was still weak and spastic, the knee-jerk was increased and ankle clonus was present. The evidence, so far, is strongly in favour of the case being one of organic hemiplegia, due probably to cerebral softening following thrombosis occurring during typhoid fever. It was therefore expected that the left plantar reflex would be extensor, but it was quite definitely flexor. The organic nature of the hemiplegia was, however, proved by the presence of the "combined movement of the trunk and pelvis," described by Babinski, which Dr. Hertz had called, for convenience, "Babinski's second sign." The patient, lying flat upon his back, with his arms folded across his chest and his legs widely separated, was told to rise to the sitting position without using his arms. At each attempt to do so the paralysed leg rose, the other leg remaining on the floor or rising considerably less high. The same thing happened to a less marked degree when the patient fell back from the sitting to the dorsal position.

Babinski was the first to point out that the paralysed leg remained flat on the floor in hysterical hemiplegia, whereas in organic hemiplegia it always rose higher than its fellow. In Dr. Hertz's experience the sign was of great value, as he had several times obtained it when the plantar reflex was unobtainable, and also in children under the age of 3 in whom the plantar reflex was normally extensor.

Mr. **Thomas H. Kellock** showed a boy after pneumotomy for foreign body in the right lung, and read a short paper on the case. The foreign body, a large pin, has been inhaled to the base of the right lung. After bronchoscopic methods had been unsuccessful, Mr. Kellock cut down upon the lung, turning up a large flap of the thoracic parietes at the right base. He then incised the lung from its diaphragmatic surface and removed the pin, which was embedded in lung tissue. No empyema existed or followed. The operation had been followed by good recovery.

Obstetrical and Gynæcological Section.

Meeting held Thursday, December 5th, 1912.

The President, **Dr. Amand Routh**, in the Chair.

A short communication was read by Mrs. **Willey**, M.D., on a case of

HYDROCEPHALUS COMPLICATED BY ECLAMPSIA, FIBROIDS, AND A CONTRACTION RING.

The patient, who was 37 years of age and a primigravida, was first seen in the seventh month of pregnancy, when slight œdema and albuminuria were present, but these symptoms disappeared under treatment. The fibroids were subperitoneal and situated near the fundus. Pregnancy went to term, but the membranes ruptured ten days before labour; the presentation was a footling. Six or seven hours after the onset of pains an eclamptic fit occurred, followed by two others at intervals of half an hour. The urine now contained a good deal of albumen. The legs, body and arms were delivered by traction, and it was then found that the descent of the head was arrested by a firm ring of contraction round the neck. Above the ring intermittent contractions could be felt in the body of the uterus; the cord had ceased to pulsate. A large mass could be felt in the uterine cavity, but whether this was a fibroid or the enlarged head could not be made out. The spinal canal was accordingly punctured in the lower dorsal region, and cerebrospinal fluid flowed out freely. Traction was now steadily kept up, and in 20 minutes the contraction ring yielded and the head was delivered. Two more fits occurred after delivery. The temperature was over 100° for three days, and there was some jaundice, but in the end her recovery was satisfactory.

Dr. **Clifford White** read a paper on

THE CONTRACTION RING AS A CAUSE OF DYSTOCIA,

in which he contrasted the clinical picture given by these cases with those where a retraction ring forms as a result of obstructed labour. The chief points are: That with a contraction ring, (1) the lower uterine segment is not thinned or over-distended; (2) the ring forms over a depression in the outline of the child or below the presenting part; (3) the general condition of the patient remains quite good; (4) the body of the uterus as a rule remains relaxed and not tender; (5) the presenting part is not forced down into the brim; (6) it may occur before rupture of the membranes.

The most important causes of the condition are: (1) Premature rupture of the membranes; (2) intra-uterine manipulations; (3) malpresentations.

The treatment in severe cases is difficult. The slighter cases are best treated by manual dilatation of the ring with the fingers, but if these means fail it may be necessary to perform Cæsarean section, as forceps fail and embroyotomy is usually very difficult. The reason why both these means fail is because the ring, being tightly round some depression in the child, will not let the child move except with the uterus, and thus traction by forceps merely drags the uterus as a whole towards the vulva. If craniotomy is performed, cleidotomy must also be done to enable the shoulders to pass the ring, which is usually round the neck. A further difficulty in performing embryotomy is that the proportion of macerated children is high (10 per cent.), and so any portion of the child on which traction is made usually pulls off. If Cæsarean section is performed the incision will usually have to be continued downwards till the ring itself is divided before the child can be extracted. The most difficult cases to treat are those where the uterus is infected. (Statistics seem to show that infection of the uterine contents is frequent in these cases and may be a factor in its causation.) In these cases, if the child is alive Cæsarean section, followed by hysterectomy, is indicated. The extra-peritoneal operations would not be possible owing to the length of the incision required. If the child is dead and the mother is infected it may be necessary to excise the gravid uterus, as the recorded cases show that the embryotomy is a particularly difficult one and attended by a high mortality. He reported three cases: the first was treated by embryotomy, which was very difficult, as the child was wholly above the ring and a placenta prævia prevented access. The mother died with a ruptured uterus. The second also had a placenta prævia, but was delivered by craniotomy and cleidotomy. The ring was wholly below the child. The mother recovered. The third case was one with a transverse presentation with the ring firmly contracted round the prolapsed arm so that even the finger could not pass it. The child being dead, and the mother having had five other living children, and being infected, the case was treated by excising the gravid uterus unopened. The mother did well. The uterus, after hardening, shows the ring formed round the child's neck and constricting it. The ring is most marked where the fœtal parts allowed constriction—*e.g.*, the neck—and became less marked over points of greater resistance—*e.g.*, the arm. It thus shows the great importance of the fœtal outline in determining the existence and site of the ring. Measurements of the specimen show that there is no thinning of the lower uterine segment. Details of 18 cases treated by laparotomy are given.

The paper was discussed by the President, Dr. Handfield-Jones, Dr. Griffith, Dr. Eden. Dr. Williamson, Dr. Russell Andrews, Dr. Willett, Miss Aldrich Blake, and Dr. Eardley Holland.

LIVERPOOL MEDICAL INSTITUTION.

Clinical Meeting held Thursday, December 5th, 1912.

The President, **Mr. Robert Jones**, in the Chair.

Numerous cases were shown by the members, and Dr. **Stopford-Taylor** and Dr. **R. W. Mackenna** presented a paper on

IONIC MEDICATION.

The authors explained the principles upon which ionic medication depends, and showed how in dilute solutions of salts there are present three varieties of elements—viz., positively charged metallic radicles, negatively charged basic radicles, and neutral molecules of the salt. The ions of metals, the hydrogen ion of acids, and the alkaloids carry a positive charge of electricity, and may therefore be introduced into the body under the positive electrode. The metalloids and non-metals, the halogens and the hydroxyl ions of alkalies are negatively charged, and are introduced under the negative electrode.

Penetration through the skin is chiefly through the glandular orifices, the current choosing the path of least resistance. The depth of penetration is dependent upon the intensity of the current and the duration of each treatment.

Some of the ions, especially those of the heavy metals, enter into new combinations with the albuminous fluids of the body and are precipitated. Others combine with the salts in the tissue cells, while others pass into the tissues in the soluble state and are rapidly diffused.

The ions of all the heavy metals are more or less caustic. In large doses they are destructive, in small doses stimulating. The zinc ion is a very powerful coagulator of albumin. The action of the chlorine ion is entirely different from the action of free chlorine, which is a powerful oxidiser and antiseptic. Ionised chlorine has the power of softening cicatricial tissue.

In applying treatment the pads used must be thick and well saturated; the metal electrode should not touch the skin at any point; the skin must be free from abrasions; all breaks in the continuity of the conductors must be eliminated, and the current must be introduced and cut off very gradually.

The widest field for the application of ionic therapy is dermatology. The zinc ion gives excellent results in the treatment of lupus vulgaris, the resulting scar being soft, pliable and elastic, and differing only slightly in colour from the normal skin. Ionisation with zinc is the best method of treating intra-nasal lupus. The zinc ion will also cure many cases of rodent ulcer, and coccogenic sycosis may also be treated with this ion. The chlorine ion will cure alopecia areata. Ringworm of the scalp may be treated with the iodine or mercuric ion. The copper ion has been used for lupus erythematosus, and the magnesium ion will cure multiple warts. Pigmented stains may be removed from the skin by ionisation. The advantages of ionic medication are the ease of applying it, its camparative painlessness, and the fact that it enables us to introduce remedies into the actual protoplasm of the cell. Even greater results may be expected from ionic medication when some of the radio-active salts have been pressed into service.

Among the cases shown and bearing on the paper of the evening, Dr. Stopford-Taylor and Dr. R. W. MacKenna showed a large number of patients suffering from skin diseases. The most interesting were: (1) a girl, æt. 8, with three varieties of tubercular lesions—viz., lupus pernio, affecting the fingers, lupus erythematosus, and pulmonary tuberculosis. Von Pirquet's test, positive.

(2) A man suffering from Darier's disease. Under treatment with the X-rays very marked improvement has been obtained, as shown by photographs taken before treatment was begun.

(3) A case of lupus verrucosus, treated with zinc ions. The soft and pliable scar, of almost normal colour, was a striking feature. Photographs of the hands, showing the great extent of the disease before treatment were also exhibited.

(4) A case of chlorine acne in a chemical labourer. The whole trunk of the patient before treatment was covered with large sebaceous cysts, which were removed by excision. The smaller lesions had been treated with the X-rays with great success.

Two cases of extensive favus, a case of scleroderma, and a case of ichthyosis were also shown, as well as a large number of interesting photographs and wax casts of cutaneous affections.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

FRANCE.

Paris, Dec. 14th, 1912.

Urticaria.

No matter what may be the cause of urticaria, there exists a certain number of remedies to allay the intolerable itching provoked by the eruption.

These are: lotions, powders, ointments and cotton wool dressing. Baths, starch or alkaline, says Dr. Gaucher, are more hurtful than beneficial in urticaria. On the other hand, lotions of hot water to which is added one third of vinegar or a one per cent. solution of phenic acid with a little glycerine, relieve very well the patient; if, however, these lotions fail to suffice, sedative powders are applied:—

Powdered starch, 3 oz.
Powdered talc, 3 oz.
Powdered camphor, ½ dr.

Ointments of oxide of zinc and menthol can also give relief, and, in certain bad cases, Mr. Gaucher, prescribes syraying with:—

Chloroform, 1 oz.
Spirits of camphor, 1 oz.
Sulphuric ether, 1 oz.
Menthol, 2 drs.

When the local treatment does not suffice to remove the itching, the nervous condition should be relieved by preparations of valerian:—

Valerianate of ammonia, ½ dr.
Tincture of valerian, 2 drs.
Peppermint water, 3 oz.

A teaspoonful night and morning.

Insomnia will be treated with chloral, trional, veronal or bromide of potassium.

Quinine in five-grain doses twice a day acts frequently as a specific, while chloride of calcium will also be found useful in the chronic form of urticaria.

Cutaneous Streptococcia.

Impetigo of the face, head and body is frequently observed in children of the poorer class, and is due to inoculation by the streptococcus and easily transmitted by contact, hence its prevalence in schools.

According to Dr. Sabouraud, who made a particular study of this affection, the local treatment is essentially that of the applications of a slightly caustic solution of zinc and copper followed by zinc ointment:—

Spirits of camphor, 2 drs.
Sulphate of copper, ½ dr.
Sulphate of zinc, 1 dr.
Water, 10 oz.

All the crusts are removed with this liquid and the raw surfaces touched with caustic three or four times a day, after which the ointment is applied.

In phlyctenular conjunctivitis a few drops of the following solution are instilled night and morning:—

Sulphate of copper, 4 grs.
Water 3 oz.

Streptococcic infections of the natural folds of the skin, as well as impetigo of the corner of the mouth, edges of the nose, behind the ears, is best treated by:—

Proot spirit, 4 oz.
Tincture of iodine, 1 dr.

Rupia ecthyma should be treated by baths, good food and rest, while the caustic solution of sulphates of zinc and copper is freely applied, and finally:—

Sub-carbonate of iron, ½ dr.
Vaseline, 2 ozs.

A Remarkable Discovery of a Crime.

On November 2nd, a women belonging to the unfortunate class was found strangled in a retired spot of the Bois de Boulogne. The doctor charged with the autopsy remarked, besides the ordinary signs of strangulation, a piece of skin held firmly between the teeth of the victim. He laid it aside carefully wondering where it had come from.

The following day, commotion was excited in a fashionable quarter of Paris by the suicide of a gentleman, over 50 years of age, of noble extraction. A note in the handwriting of the suicide was left in evidence on the table stating that he committed suicide on November 2nd. This unusual declaration led the family doctor, who was called in, to carefully examine the body, and he came to conclusion that the suicide took place on November 3rd and not the previous day as pretended. Why this false statement? But the inquiry reserved other surprises.

More minute examination of the body revealed the existence of a wound of curious form on the penis; a part of the prepuce was missing! The extraordinary discovery was brought to the attention of the police authorities, and the following day the Press mentioned the fact in covered terms. When the doctor who had made the autopsy of the woman read the report, he remembered the piece of skin he had found in the mouth of the corpse and brought it to the police who found that it exactly adapted itself to the solution of continuity found on the genital organ of the count; thus, the whole mystery was cleared up. The count, by anticipating his suicide, wanted to create a posthumous alibi, so as to leave this world with his reputation intact, but it was evident that he was the assassin. The fact was still further confirmed by a witness, who stated that the count was in the habit of frequenting a certain class of girls in the Bois de Boulogne for the purpose of practising unnatural acts.

Here is an instance of how legal medicine can reveal facts which would easily have passed the notice of a superficial observer, and seem incredible if they were not founded on positive evidence.

GERMANY.

Berlin, Dec. 14th, 1912.

The Friedmann Treatment of Tuberculosis.

This matter came up again on an adjourned discussion on the 13th ult. Hr. Friedmann on the occasion added somewhat to his previous pronouncement. He repeated that he had not said what his curative material consisted in. Whether he will act up to the traditions of the noblest of professions, or as a quack—keep his secret and *sell* it to the highest bidder, and so make a fortune for himself out of it, still remains to be seen. "I have thoroughly tested many and many a kind of avirulent cultures, also such as were obtained from the human subject, that had been rendered avirulent by various methods, but I have quite given them up."

In fact, he had made use of the most varied nonvirulent kinds—those from warm-blooded animals that had been made avirulent, others from the most diverse cold-blooded ones. In 1903 he had published results of investigations into tortoise tubercle. In 1904 he made a further communication on a second tortoise strain. If the first strain was only slightly virulent, it set up nodules in the guinea-pig that never led to tuberculosis; still the nodules could be felt year after year. A third strain was discovered, a natural one that showed avirulence in a high degree, and concerning this he had never published anything. Even in its natural state it was perfectly harmless for guinea-pigs, it caused scarcely any nodules, and in a short time it lost the last trace of virulence. He then used the preparation more extensively, and on the human subject. His preparation was, therefore, perfectly harmless for guinea-pigs. Animals that had been injected two and three years were perfectly sound and free from nodules. He might also state that he had experimented with other cold-blooded animals, fish, salamanders, blind worms, snakes, also with other tortoises, but, without exception, with results that were not good.

Hr. Erich Müller said they had just heard from Hr. Friedmann that his form of bacillus was not from the human subject or from cattle, but from some cold-blooded animal, the bacilli from which were quite avirulent for man. The recoveries he had seen were such as were not possible by any other known means. He believed also that children injected would be safe from infection. A child shown by Friedmann was very remarkable. Like many similar cases, it showed the harmlessness of the injection, and spoke strongly in favour of the protecting power of the preparation in that in the midst of a tuberculous milieu it had remained free from the infection. The protective inoculation had been then made about a year. For the future—the immediate future, at any rate—they would limit their injections to children that were ill.

Hr. Kausch would ask them to restrain their enthusiasm for the present, and bear in mind Koch's first pronouncement and salvarsan in syphilis.

Hr. Piorskowski related some details of the work he had done for and with Friedmann, and concluded that the culture, some of which he had brought with him to show, looked exactly like human tubercle, and behaved exactly like it in the incubation oven. For that reason he believed that the tubercle from the great tortoise of the Berlin aquarium was of human origin, and was to be reckoned as of the typus humanus.

Hr. Aronsohn would like to know the dose given by Friedmann—i.e., the number of bacilli he injected. He could only understand by the simultaneous method that a smaller dose than usual was given in each, and that the absence of abscess formation was due to the smaller quantity injected.

Hr. Wolff-Eisner said that no proof had been brought forward that the injections were harmless. In that short time it was impossible to say that they were harmless. It was also possible that some of the cases recorded as cured were not really cases of active tuberculosis.

Hr. F. Meyer would like to know whether Friedmann had submitted his cases of cure to the tuberculin test. The cases that had been shown would have got better by tuberculin treatment. He could not take it that Friedmann had said that they were cured. He would raise an energetic protest against protective injections, both on ethical and scientific grounds.

Hr. Bier had seen a number of Friedmann's cases. He must confess that he had received the impression that there was a decided curative action, but he had not so far seen any decisive proof.

Hr. Schwenk said that he could not altogether agree with what Friedmann had said. There was one case which his colleague (Hr. Friedmann) had described as cured. He (Hr. Schwenk) had seen the case the day before. There was no question whatever of a cure, nor even of improvement. The patient was sent to Friedmann in 1911. She had about six injections. In August of last year she was again under treatment, and had two injections. She reacted with a universal urticaria, which lasted for several days. She was no better.

Hr. Katzenstein said that in surgical cases of moderate degree we had in tuberculin such an excellent remedy that we had no occasion to have recourse to an unknown remedy.

AUSTRIA.

Vienna, Dec. 14th, 1912.

Ileus and Pneumatosis.

Demner presented a case from Hochenegg's ward, who had been operated on for gastric growth and vomiting. For six years and a-half the patient had suffered from persistent vomiting with severe pain. Under local anæsthesia the patient was operated on and two large emphysematous cysts, each the size of a man's fist, were removed from the right subphrenic region, which pressed the liver beyond the middle line towards the left and compressed the pylorus. The small intestine was enormously dilated to 90 centimetres in circumference of 34.43 inches. Along the external surface of the bowel as well as of the mesentery were strewn large and small cysts like grapes, in some places very densely arranged. The contents of these cysts were mostly gasoeus, but where degeneration had set in and the cyst had become cloudy, a serous fluid was present. This degenerative change was mostly confined to the mesentery. It seemed that a number had degenerated to the size of peas, giving the mesentery a shaggy appearance, while others were in threads and plaques.

The histological diagnosis was given as pneumatosis intestini cystoides, although the clinical diagnosis was pyloric stenosis from the history of ulcus ventriculi, which was not altogether wrong as the stenosis and an old cicatrix in the organ were very prominent with fresh inflammatory areas on the perigastric surface, more particularly on the posterior surface. The ileum and cæcum did not escape these changes being affected with a severe form of appendicitis and adhesions. After stripping and removing, the patient has made a wonderful recivery, looking well and feeling strong, as the appetite is good.

Œsophageal Dilatation.

Koffer next brought in a case from Chiari's clinic with enormous widening of the œsophagus and cardial spasm, for which he was operated on by Heyrodsky. The spasm in the cardial portion of the channel could not be accounted for. The patient was 33 years of age and had suffered for years from difficulty in breathing and cyanosis in consequence of the great pressure on the trachea.

Gottstein's operation of passing the sound was tried but failed. Gastrostomy was next resorted to, but this failed to relieve the cardial spasm, but feeding was more easily performed. The bougie could not be passed up the œsophagus nor down, as it was caught at the cardial end of the organ. Finally he determined to operate over the site of obstruction and found at the hiatus of the diaphragm a band of fibrous tissue strangulating the œsophagus; this was released and the channel opened freely into the stomach. The wound healed up normally in 14 days, while the feeding was conducted by the opening in the stomach, which is now ready for closing also as the patient can swallow without difficulty.

RESECTION OF FEMORAL ARTERY.

Schnitzler exhibited a patient, æt. 23, who had suffered from tubercular lymphoma in the left inguinal region closing the venous circulation by inflammatory adhesions. Before admission an effort had been made to relieve the veins, but in the operation the femoral artery got injured, which increased the lesion. Schnitzler ligatured the veins, but found no pulsation in the femoral vessel, while the leg remained white and dead.

He then determined to resect the injured portion of the artery and unite the free ends of the artery by circular stitching of the vascular walls of the vessel. The operation was quite a success. The circulation in the leg was immediately restored and the limb gradually assumed its natural colour, and the patient feels perfectly well.

FROM OUR SPECIAL CORRESPONDENTS AT HOME.

SCOTLAND.

THE LORD LISTER MEMORIAL.

THE Lord Provost of Glasgow presided over a meeting, on December 11th, of the Executive Committee in the City Chambers, on the proposed memorial to the late Lord Lister.

The Committee had under consideration the remit made to them by the Provisional Committee at their meeting held last week to reconsider the question of the establishment of a Lister Museum in one of the wards of the Royal Infirmary in which Lord Lister first put into practice his antiseptic system of surgery.

Dr. George Middleton moved, and Professor Samson Gemmell seconded, that the Committee do not approve of the establishment of such a museum.

Mr. A. E. Maylard, seconded by Mr. Hedderwick, moved as an amendment that the previous recommendation of the Committee be reaffirmed, namely, that subscriptions be invited, first towards the erection in Glasgow of a suitable monument to Lord Lister and the provision of an endowment for the equipment and maintenance of the proposed Lister Museum at the Royal Infirmary and, second, towards the Lister International Memorial Fund promoted by the London Committee.

On a vote being taken Mr. Maylard's Amendment was carried, and the treasurer reported that since the last meeting he had received several additional subscriptions.

NERVES AND WORRY.

Dr. Alfred B. Olsen, the principal of Caterham Sanatorium, delivered a lecture recently in Glasgow at the Deaf and Dumb Institute, on "Nerves and Worry." Dr. Olsen said that this was an age of restless hurry and worry, and that the conditions of artificial exciting city life were apt to strain and overtax the brain. Life was largely what people made it, and it had been clearly proved that training and environment were more potent factors than heredity. Man was made for work, his muscles, heart, lungs, brain and nerves were given him for use; and the more in reason he used them the more efficient, the stronger and the healthier they became. Normal use of the functions of the body was constructive and vitalising, but worry wasted the vital forces of the body. Worry has been described as a disease of the twentieth century, and it was a truism to say that it was not work but worry that killed.

In discussing the causes of worry it was found that domestic troubles probably headed the list, but the worries and cares associated with modern business competition were almost of equal importance. In an analysis of 604 cases of neurasthenia, 198 were merchants and manufacturers, 130 were clerks, 68 professors and teachers, 56 students, 38 officers, 33 artists, 19 of no profession, 17 medical men, 17 agriculturists, 10 clergy, 6 men of science and learning, 6 schoolboys, and 6 working men. Alcohol was a nerve poison, and interfered with the work of the brain cells, while tea, coffee, cocoa were drugs. To secure perfect health and sanity it was of great importance to cultivate regular hours and obtain sufficient sleep, for nervous diseases and insanity were on the increase, and it behoved us to take heed to our ways lest we became a nation of invalids.

VACCINATION AND SMALL-POX.

Recently Kirkcaldy has been under the ban of the Public Health Authorities with sporadic cases of small-pox appearing throughout the town. The Health Committee hope that they have now got over the disease. On November 10th there were twelve cases in the hospital, nine convalescent and three improving, while fifteen cases of contacts were isolated in the reception house.

At the monthly meeting the Convener of the Health Committee was asked the effects of vaccination in the present outbreak, and stated that 41 cases of small-pox had been treated in the hospital—40 from Kirkcaldy and one from Dysart. Thirty of these were vaccinated at birth, and of these six had died, including two women who had no chance of living because of their condition, thus showing a mortality of 20 per cent. of deaths of those vaccinated. Eleven other cases were unvaccinated, or showed no signs of vaccination, and of these seven, or about 63 per cent., had died. There were nine cases of contact who refused vaccination or re-vaccination, all of whom developed the disease, and three of these died. Generally speaking, the severity of the disease was in direct proportion to the length of time that had elapsed since they were vaccinated.

GLASGOW DOCTORS AND THE INSURANCE BILL.

Obeying the instructions of the Council of the British Medical Association, meetings of members of the medical profession have been held in Glasgow for the purpose of considering the latest proposals by the Chancellor of the Exchequer for service under the Insurance Act.

Under the presidency of Dr. A. T. Campbell, the members of the North-Western division of the city met in the Burgh Hall, Hillhead, where the question of accepting or declining service was fully discussed, and it was decided by a majority to decline to work under the Act under present conditions.

A meeting of practitioners of the Southern Division was held in the Y.M.C.A. Hall, Eglinton Toll, when a vote of members of the Association and non-members was taken separately, and it was resolved by a large majority to refuse to accept the terms offered by the Chancellor of the Exchequer.

Dr. Robert Jardine presided over a good attendance of members and non-members of practitioners in the Central Division, held in the Faculty Hall; it was decided by a majority to render service under the present terms.

A meeting of the Stirling Branch of the British Medical Association was held on Tuesday, 10th inst., at Larbert, to consider their further action regarding the National Insurance Act. The meeting instructed the delegates who were appointed to attend the representative meeting of the Medical Association to vote in favour of giving service under the Act.

SMALL-POX IN GLASGOW.

Dr. A. K. Chalmers, the Medical Officer of Health for Glasgow, reported to the Health Committee that towards the end of the first week in December a case of small-pox occurred under circumstances which create some anxiety as to the immediate result. The patient was one of the crew of a vessel which arrived at Rothsay Dock on the morning of December 4th from Seville, and has been taken to Crofthead Hospital. The patient's home was in Ayr, and he went home by train on the evening of the arrival of the vessel, and returned to his work on the vessel the following morning, December 5th. He remained at work during that and part of the following day, but feeling too ill to continue returned to Ayr on Friday, December 6th, where he consulted a doctor, and was discovered to be suffering from small-pox. On inquiry being set on foot, it was found that the patient had made three journeys between Glasgow and Ayr, travelling in a third-class compartment with other passengers, whom the Health Department are unable to trace. He visited at least three places of refreshment and one music hall, and must have been in close proximity to many people during the two days Thursday and Friday.

All the crew of the vessel were revaccinated, and the ship sailed last week for Cardiff. The known contacts are being kept under observation, and disinfection has been carried out of all places which the patient was known to have visited, but a considerable number of unknown persons must have been in contact with him at some stage of his movements, and it is with regard to those that most anxiety prevails.

BELFAST.

Belfast District Lunatic Asylum.

The annual report of the Inspector of Lunatics, Dr. T. J. Considine, on the condition of the Belfast Asylum has just been published, and is calculated to give much pleasure to all concerned, as the Inspector gives unstinted praise to the Villa Colony at Purdysburn, on which so much money has been spent during the last few years. There can be no question, he says, that for healthfulness and comfort the buildings and site at Purdysburn are unsurpassed by any public asylum in the United Kingdom, and this has been achieved at a very moderate cost owing to the energy and industry of the Committee of Management, whose untiring devotion to the welfare of the insane cannot be too highly spoken of. There are now about 400 patients in the new asylum, and about 800 in the old asylum in the city, and about 50 more in Ballymena Workhouse. The Inspector urges the hastening of building operations at Purdysburn so that more patients may be housed there, and this plea is earnestly seconded by the Resident Medical Superintendent, Dr. William Graham, whose aim is to transfer all patients eventually to the country asylum, and close the old city asylum entirely.

Public Health.

Belfast is at present suffering from an outbreak of scarlatina and measles, with considerable mortality among children. The general death-rate has in consequence risen to 23.5. It is most satisfactory to note that typhoid is almost absent from the city. Some weeks lately no cases have been reported, and other weeks only one or two. A few years ago it was taken for granted that cases would occur by the score at this time of year.

Medical Students and the Union Hospital.

The Infirmary Committee of the Belfast Guardians have been considering a request from the Belfast Medical Students' Association that a number of senior medical students should be admitted as resident pupils in the workhouse hospitals. A deputation attended from the Association to urge their request upon the Guardians. They pointed out that at present the yearly average number of students entering the Belfast Medical School is about 60. The Royal Victoria Hospital can take 32 resident students each year, and the Mater Hospital can take 16 for a period of three months each. The students pay the hospital authorities about 15s. per head per week for maintenance. Dr. Hall, on behalf of the visiting medical staff, said that the proposal had their full approval, and he believed that if it were granted it would tend to raise the standard of the training school for nurses, and would improve the status of the institution. The Master said that he could provide accommodation for four students at a time, and it was ultimately resolved to inform the Local Government Board of the request, and ask whether such a scheme had been adopted by any other poor-law institution in Ireland, and whether the Board would be prepared to consider such a scheme for Belfast.

The Insurance Act.

A meeting of all the medical men in the Belfast district was convened on December 12th by the local division of the British Medical Association to consider the answer to be made to the Chancellor's latest proposals. The Chairman of the Division, Dr. Gardner Robb, presided, and made a short statement as to the present position, and called upon the secretary and representative of the Division, Dr. George Elliott, who made a further statement, and explained various points upon which members were not clear. The voting resulted in 164 being against accepting service under the conditions offered by the Chancellor, and 10 in favour of accepting. The Chairman made an urgent appeal for support to the Guarantee Fund, without which, he said, it was impossible to maintain the fight. Some members seemed to have an idea that the fund should depend upon the consultants and a few members who made big incomes, or at least whose incomes were derived from larger fees, but this was the general practitioners' own affair, and if they did not support the fund they need not expect others to do so.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

REFLEX STIMULATION OF THE VAGUS CENTRE IN THE TREATMENT OF DISEASE.

To the Editor of The Medical Press and Circular.

Sir,—I have read Dr. Brand's article in the Medical Press and Circular, December 11th, 1912, p. 631, with much interest. For many years I have paid attention to the subject of counter-irritation, and have a high opinion of its possibilities. As he points out, one of the great drawbacks to a more universal adoption of this method is the fact that no one has done the sort of scientific work that is so necessary nowadays before medical men will believe. The mere clinical observations of any worker, no matter how eminent he may be, are looked on with scepticism, and when they emanate from such an obscure person as myself they are scorned as unworthy of notice. My first contribution was a modest letter to the *British Medical Journal* about ten years ago. Two medical men took notice of it. One asked for more particulars, and by a modified plan has produced splendid results ever since at a well-known spa. The other wrote to the Journal saying the treatment could be nothing more than palliative. I have been accused of undue optimism, claiming results unjustifiably, imperfect observation, and so on. Some have called me a quack, others have said the whole thing was due to suggestion, that the patients would have got well anyhow, and so on. The most serious setback I have received at all was at the hands of an eminent London practitioner, who said he had tested the methods I advocated, in a series of cases, and had convinced himself that they possessed no advantage over already well-tried procedures. He, as far as I know, has never published notes of these cases, nor would he send me any when requested to do so.

By chance I heard of one of his cases. The patient was treated by the method in question for one week only. It was then condemned as unsuitable. In my opinion no practitioner, however eminent, should conduct such observations until he has had a good training by someone experienced, and it would be better if the first few cases he attempted on his own account were supervised.

This may sound unreasonable, but I am now referring to spinal blistering as advocated by Dr. P. W.

Latham. In experienced hands this remedy does an immense amount of good in some of the most obstinate cases of arthritis, and also in certain cases of organic disease of the spinal cord. If conducted by a novice the patient may suffer unduly. I can quite believe that Dr. Brand has not yet heard of me or my doings, I would therefore ask him to kindly refer to my article in the Medical Press and Circular, May 8th, 1912. I feel sure he would be interested, as there is much in it that goes far towards supporting his own valuable work.

I am delighted that he has made these observations, as it will advance the cause of counter-irritation and will be a valuable addition to such an established fact that wherever hyperæmia is produced antibodies are created of better quality and in greater quantity than before.

The theory that germs and toxins are extruded through raw surfaces in the skin, from deep parts of the system, is not generally believed, but I strongly support it myself.

I feel that the time is not far distant when counter-irritation and bleeding will be placed on a scientific footing by modern methods and be universally used in spite of the more dazzling vaccines, X-rays, salvarsan, etc.

I also heartily welcome Dr. French's remarks on bleeding. His plan will do much towards restoring this undoubtedly powerful remedy to popular favour. I have read this article carefully, but I failed to find any reference to Schroeder's work in which he claims to have proved that a series of small blood-lettings raise the body resistance to infection, and so promote general well being. See *B. M. J.*, Jan. 8th., 1910.

I congratulate you, Sir, on your acumen and broad-mindedness in publishing the articles in question, and feel grateful to you also.

I am, Sir, yours truly,
W. J. Midelton.

112, Charminster Road, Bournemouth.
December 14th, 1912.

TREATMENT BY COUNTER-IRRITATION.

To the Editor of The Medical Press and Circular.

Sir,—I was interested in Dr. Brand's article on stimulation of the vagus in treatment of vomiting and purging. I have not a *Medical Digest* by me, but I think if anyone looks up the subject he will see it discussed about 24 years ago. I fix the time thus: A charwoman who had been assisting while my servants were laid up with influenza in one of the early epidemics returned one night late bringing her child of a little over a year. It was collapsed with vomiting and purging, and my wife asked me to see to it. To her astonishment I proceeded to paint blistering fluid on a small space about the size of a shilling on the neck below the angle of the jaw, and she laughed at treating the neck instead of the abdomen. However, the child was brought next morning very much improved, and quite rallied. The small doses of calomel had probably something to do with the recovery. The treatment was not original on my part. I do not write this to in any way depreciate Dr. Brand's article. We ought to be obliged to him for advocating an old method of treatment, of which I have had frequent proof of the efficacy, as nowadays nothing is good unless new. I have not had any experience in treatment by this method in the other cases mentioned.

I am, Sir, yours truly,
James Hamilton, M.D.

60, Sydney Street,
Chelsea, S.W.
December 16, 1912.

University of Oxford.

At a Congregation held on December 14th the following degrees were conferred:—

D.M.—C. D. H. Corbett, University.

B.M.—H. T. Evans, Jesus; G. H. Varley, St. John's; G. Stanger, Lincoln; R. A. Fawcus, Oriel; E. Scott, St. John's; J. Sainsbury, Oriel.

REVIEWS OF BOOKS.

TUBERCULOSIS OF JOINTS. (*a*)

In the introduction to his monograph, Dr. Ely opines that the treatment of tuberculosis of joints in the present day is almost entirely empirical, as we have not sufficiently considered, or are ignorant of, many of the fundamental facts concerning joint lesions as shown by the microscope and naked-eye specimens. We have tried to substitute clinical experience for exact knowledge. On this account the writer has dealt with the subject in some detail from the pathological point of view in the first forty pages of his work. He discusses at some length the joint tissues which are, and those which are not, attacked by the tubercle bacillus, the effects on them of abscess formation and mixed infection, and the histological changes brought about by the different methods of treatment. He bases his conclusions on the facts he has ascertained by a painstaking and systematic macroscopic and microscopic examination of a number of operation and museum specimens. According to him, conservative methods are the proper and rational treatment of joint tuberculosis in the young. In adults, when no improvement follows six months' treatment by rest, etc., the knife should be used, not with the idea of removing all diseased tissue, but to render the joint functionless, by bringing about bony ankylosis, if possible. Cure follows, because susceptible joint tissues are replaced by those in which tubercle cannot flourish, provided there is no secondary infection. As an example we quote from the latter half of the work, which deals systematically with the diseases of the spine and various joints. "Consequently, in our resections of tuberculous hips" (in adults), "we shall not attempt an impossible task" (*i.e.*, extensive and complete removal of tuberculous granulations), "but shall simply lay hold of the vital principle—dislocation." "We deprive the joint of function."

Dr. Ely's work is well and suitably illustrated with skiagrams, micro-photographs and other figures. The text is divided into two sections and an appendix. The first section, "Joint Tuberculosis in General," besides pathology, discusses symptomatology, diagnosis, and treatment. Section II. we have already referred to. The appendix contains some seventy clinical histories of patients, which include the laboratory notes on the diseased arthritic structures removed at operations. A great number show no tubercle in the diseased bone on microscopy; in the majority tubercles were found in the synovial membrane, and in a few no tubercles were found, although the condition was diagnosed clinically as tuberculosis.

Although some will not agree with the author's conclusions, this cannot seriously impair the value of Dr. Ely's work and records, which are a useful addition to the literature of the subject, and will repay the reader's careful perusal.

DISEASES OF THE NERVOUS SYSTEM. (*a*).

In this volume on Diseases of the Nervous System, the author has made a departure from convention, in that he has adopted, as far as is possible, a clinical rather than a gross anatomical classification of the diseases of which he treats. The usual arrangement of grouping together all lesions of the brain, or of the spinal cord, or of the peripheral nerves, is replaced by one which brings the symptoms of lesions of various systems of neurones into prominence, irrespective of whether the site of the lesion in the neurones be central or peripheral. Thus we find hemiplegia, monoplegia, primary lateral sclerosis, and disseminated sclerosis in consecutive chapters. Again, lesions of the cauda equina, multiple neuritis, and anterior poliomyelitis follow each other without any aggresive interruption. Whatever the neurologist who has already mastered the primary difficulties of dealing with his subject may think of this arrangement—he may (though we do not believe it) hold it to be un-

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(*a*) "Joint Tuberculosis" By Leonard W. Ely, M.D., Orthopædist to the Children's Hospital, Denver, U.S.A. Royal 8vo., Pp. 241. Illustrations 72. Bristol: John Wright and Sons. 1911.

(*a*) "Diseases of the Nervous System." By Judson S. Bury, M.D., F.R.C.P. Manchester University Press. 1912.

scientific—there is no doubt that the student who is struggling with the elements of neurology will find it admirable. It not only enables him to remember the phenomena presented by the symptom-complexes which have arrived at the dignity of a name, but—and this is the important thing—it introduces him to the principles of topographical diagnosis on which he has to rely in every case for which a parallel cannot be found in his reading or previous experience. Moreover, it awakens him to the extreme interest of the diagnosis of a nervous disease which before seemed too complicated and terrible to face.

In the opening sections on anatomy and physiology the author has given in a brief space a very accurate and concise account of our present knowledge on these subjects. He has chosen well what to omit and what to retain. A knowledge of these early chapters will prevent difficulties in understanding symptoms which would otherwise arise when the phenomena of various diseases are being investigated. The accounts of the better known diseases—*e.g.*, locomotor ataxy and disseminated sclerosis—are well written and not burdened with too much theorising or the recital of rare complications. The book nowhere aims at being one of reference, but, none the less, it contains much valuable information on rarer conditions, and on the rarer manifestations of common conditions.

The sections dealing with tetany and chorea and with habit-spasms, tics and hysteria are all good, but we regret the author did not give an account of modern theories, especially modern French theories, regarding the origin of the so-called functional neuroses. These theories are, it is true, *sub judice.* They are quite possibly erroneous and are certainly inadequate, but they are extraordinarily interesting, and they enable one to form some rational conception of the proper status of those diseases which one hears too often referred to as " only a functional paralysis," or, " another of these hysterical cases." The addition of twenty, or even forty, pages on this subject would have enhanced the value of the book. After all, these affections are among those that can be cured !

The illustrations, whether diagrammatic or from photographs, are good, and are in keeping with the general good workmanship and judgment which the author has shown throughout the book.

SIR JOHN BURDON SANDERSON. (*a*)

It was right that the life of Sir John Burdon Sanderson should receive an adequate memoir. His widow entered on the task, but left it incomplete, and in finishing the work, Professor Haldane and his sister have performed not merely a pious duty to their family, but a public service which we gladly recognise. Moreover, the collaborators show a due sense of the fitting. The authors have written an adequate memoir of a distinguished man, while they have been careful that it should not be spoiled either by over-elaboration or by an attitude of uncritical admiration. If they have erred at all, it has been in the direction of brevity.

Burdon Sanderson came of a good Northumbrian stock, many of his relatives being distinguished in various branches of learning and activity. He was born in 1829, and in 1847 entered at Edinburgh University for the study of medicine. Even at that early date it was rather the attraction of the sciences cognate to medicine than the art of healing itself that directed him in his choice of a profession. At Edinburgh of his teachers he was perhaps in closest relation with Balfour, Goodsir, and Bennett, the last of whom was the first medical teacher in Great Britain to make systematic use of the microscope. On leaving Edinburgh, he spent some time in Paris, attending the lectures of Wurtz and Claude Bernard. One of his intimates in Paris was Dr. Pavy. In 1853 Sanderson settled in London, having been appointed Registrar of St. Mary's. Three years later he became the first Medical Officer of Health for Paddington.

It is from this time that his scientific career really dates, though it was not until 1870 that he definitely abandoned his private practice, which had, indeed, never been large. Through these years, however, in addition to his work at Paddington and his hospital work at St. Mary's, the Middlesex, and Brompton Hospitals, he was constantly engaged in sanitary and physiological investigations. He conducted numerous inquiries at home and abroad on behalf of the Government, both in the field of veterinary and of human disease. His selection for such work came first from Dr. (afterward Sir John) Simon, Medical Officer to the Privy Council, who early recognised his abilities. In 1872 Sanderson was appointed Professor Superintendent of the Brown Institution, and thereafter devoted himself entirely to scientific work. His later career, first at University College and then at Oxford, is known to us all.

It is not necessary to attempt to settle Sanderson's place in the history of physiological science. Though no discovery of prime importance is assigned to him, he was essentially an original worker. He came just at a time when physiological science was beginning to be precise. He saw the need for getting away from the old generalities and untested hypotheses, and it is possible that he placed too much stress on precision of methods. "Science is measurement," he once said (though he afterwards modified it), and the phrase expresses both his strength and his limitations.

The half-dozen or so of Sanderson's papers and addresses included in this volume are admirably selected. All are of general interest and some of a special topical interest at present. His address on "Our Duty to the Consumptive Bread-earner," delivered in 1901, should be read by everyone concerned in the administration of the sanatorium benefit of the Insurance Act. Professor Schäfer's recent address should be read side by side with his former chief's presidential address to the British Association delivered in 1889. The older thinker is, at any rate, the more cautious.

(*a*) "Sir John Burdon Sanderson." A Memoir by the late Lady Burdon Sanderson. Completed and edited by his Nephew and Niece. With a selection from his Papers and Addresses. Pp. 315. Oxford: At the Clarendon Press. 1911.

LITERARY NOTES.

From John Wright and Sons, Ltd., Bristol, comes a handy and improved "Physicians' and Surgeons' and Consultants' Visiting List" for 1913, which has been compiled by Dr. Robert Simpson. This list economises space and the practitioner's time by enabling him to write his patient's name only once a month instead of weekly as heretofore. The book is well bound and of a convenient size, and the price varies from 5s. to 7s. 6d., according to the number of patients (40 to 240) for which it is ruled.

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For the medical man who is interested in photography, one of the best books of the year is the "Wellcome" Photographic Exposure Record and Diary. This little book is one which justifies its annual arrival by its unmistakeable utility. A panoramic view of all that is most practical and progressive in modern photographic processes is included in its contents, for every step in the production of effective prints, including exposure, focussing, development, the after-treatment of negatives, printing by all processes, toning, etc., is described fully, but with admirable conciseness. A novel feature this year is the article on the new method of obtaining blue and green prints by toning. Even the tyro should succeed in obtaining a high percentage of printable negatives by the use of the "Wellcome" Exposure Calculator. Three editions of the work are issued, namely, the "Wellcome" Exposure Record and Diary for the Northern Hemisphere and Tropics; for the Southern Hemisphere and Tropics and a special edition for the U.S.A. In ordering, care should be taken to specify which edition is required. The Northern Hemisphere edition is obtainable from all chemists and photographic dealers, etc., at the price of one shilling.

NEW PREPARATIONS.

PELLIDOL.

We have received from Messrs. A. and M. Zimmermann samples of "Pellidol," which is chemically the diacetyl derivative of amidoazotoluol, having the distinct advantage over ordinary scarlet red in that it possesses no colouring properties, and any stain of the skin or linen can be removed by soap and water. We have been enabled to test its action in several cases of ulceration, in which it acted extremely well. In the form of a 2 per cent. ointment it is eminently suitable for use in ulcers of the leg as an epithelial regenerator. It is soluble in alcohol, ether, and also in vaseline, fatty substances and oils.

AZODOLEN.

If "Pellidol" be mixed with equal parts of "Iodolen," itself a combination of the well-known antiseptic Iodol with albumen, containing about 30 per cent. of iodine, a yellowish powder results, which possesses no staining properties. This substance is known as "Azodolen," and this special combination of an epithelial stimulant with an antiseptic may well find a place in the treatment of those forms of ulceration where a syphilitic taint is suspected.

NOVATOPHAN.

From the same firm comes a specimen of an improved form of atophan (2-phenylchinolin 4-carbonic acid), for use in the treatment of gout. The new substance is the ethylester of methylated atophan, which, according to Dr. Bendix, is equivalent to the latter in clinical effect and in action. It has the distinct advantage, however, of being tasteless, so that it may be administered to patients with the most sensitive palate. It is an almost colourless preparation, insoluble in water, and it may be given in precisely the same dose and manner as atophan in all forms of diseases due to faulty uric acid metabolism. The tablets, 6 to 10 daily, should be allowed to disintegrate in water and swallowed, followed by more water.

Medical News in Brief.

Royal College of Surgeons of England.

At their meeting on Thursday, December 12th, the Council considered a report from the Board of Examiners in Anatomy and Physiology for the Fellowship in reference to the physiological part of the examination, and also a memorandum from a number of teachers on the same subject. The report was referred to a Committee of the Council for consideration. The Board of Examiners state, (a) that, in consideration of the large scope of the subject matter in physiology, the Examiners feel that the knowledge of candidates would be more fairly tested, if a choice of questions were permitted in the written examination in physiology; (b) that, if such a choice be approved, then the Examiners suggest that the number of questions in the written paper in physiology should be increased to eight, and the paper divided into two parts, each part containing four questions, of which a candidate must answer only two. The candidate would thus, as now, answer four questions, and the time of the whole paper would be, as at present, three hours; and (c) that, if such choice is offered, it will be necessary to inform the Examiners conducting the oral part of the examination in physiology what questions in the written paper have been answered by the candidate.

On the recommendation of the Board of Examiners in Dental Surgery the recognition of the London Hospital Dental College was confirmed. The Council also decided to add Radley College and the King Edward School, Lytham, to the list of institutions recognised by the Examining Board in England for instruction in chemistry and physics, and the course of laboratory instruction in Public Health at the University of Cambridge to the laboratory course recognised by the Royal Colleges of Physicians and Surgeons for their Diploma in Public Health.

At an ordinary meeting of the Council of the Royal College of Surgeons held on December 11th, with Sir Rickman J. Godlee, president, in the chair, the following members of the College were admitted Fellows:—

E. C. Alles, L.R.C.P.Lond., L.M.S.Ceylon, H. L. Attwater, M.A., M.B.Camb., L.R.C.P.Lond., L. Bromley, B.A., M.B.Camb., L.R.C.P.Lond., Ibrahim Fahmy-el-Minyawi, L.R.C.P.Lond., A. R. Finn, M.D.Lond., A. D. Gardner, B.A., M.B.Oxon., W. Gilliatt, M.D.Lond., E. L. Pearce Gould, M.A., M.B.Oxon, W. P. Gowland, M.D.Lond., S. L. Graham, M.B.Lond., T. T. Higgins, M.B.Manch., G. Ley, L.R.C.P.Lond., E. C. Lindsay, M.B.Lond., C. Mackenzie, M.A.Camb., L.R.C.P.Lond., A. C. Morson, L.R.C.P.Lond., A. B. O'Brien, M.D.Lond., R. Pearse, L.R.C.P., H. Platt, M.B.Lond., S. H. Rouquette, B.A.Camb., L.R.C.P.Lond., J. G. Saner, B.A.Camb., L.R.C.P.Lond., W. H. Trethowan, M.B.Lond., W. Smith, L.R.C.P.Lond., R. M. Vick, L.R.C.P.Camb., G. Viner, M.D.Lond., J. O. D. Wade, M.B.Lond., W. S. Wildman, L.R.C.P.Lond., I. S. Wilson, M.D. New Zealand.

The following candidates, not being members of the College, were also admitted Fellows:—

D. W. Hewitt, Staff Surgeon, R.N., M.B. R. Univ. of Ireland, K. Mackenzie, M.D.Edin., L. E. B. Ward, M.B., F.R.C.S.Edin.

Licentiates in Dental Surgery.

The following candidates were admitted Licentiates in Dental Surgery:—

C. A. Ascher, M. Ade, W. Adderley and D. H. Barr, D. C. Bernstein, C. C. Blundell, C. W. Bond, R. L. Booth, R. Boutwood, A. D. Buck, H. O'N. Butler, R. Campbell, C. H. Child, T. P. Cooper, W. H. Dye, P. L. Ealand, L. E. Forster, R. Fox, W. F. Gawne, J. W. Gilbert, L. P. Harris, W. A. S. Hills, H. Holburn, A. M. Hughes, A. A. Hume, H. Humphrey, G. G. Jack, W. H. Keay, R. C. Kershaw, T. C. Kidner, R. M. King, F. W. Lawrence, A. Lawrey, E. McArd, J. W. Mayer, H. B. Neely, C. J. O'Callaghan, C. V. Osborne, Lily F. Pain, W. Parry, W. L. Partridge, H. J. Pegler, C. J. Phillips, H. E. C. Rose, M. Schneider, A. D. E. Shefford, W. J. Singleton, F. J. Smith, P. J. Wakley, J. J. Ward, S. J. F. Webb.

Bequest to Dublin University and Royal College of Surgeons, Dublin.

Mr. Robert John Montgomery, F.R.C.S.I., M.A., M.B., of 4, Gardiner's Row, Dublin, member of the British Medical Association, and Dublin Ophthalmic Club, who died on July 7th last, left personal estate valued at £4,823 17s. 6d. Probate of his will, dated July 7th last, has been granted to his sisters, the Misses Fanny, Louisa Mary, and Edith Florence Montgomery, all of 4, Gardiner's Row. The testator left £5,000 to the Boards of the Dublin University and the Royal College of Surgeons, Ireland, for a "Mary Louisa Montgomery Lectureship" in Ophthalmology, to be held alternately by the said Boards for a period of five years, the lectureship for the first five years after his death being held by Dublin University. Should the income of his sisters, apart from that from real estate, amount to less than £200 per annum, then it shall be made up to that amount from the said fund, and the ultimate residue of his estate he left to his sisters in equal shares.

Medical Matters in Parliament—The Medical Acts.

Sir Philip Magnus moved a clause preventing the Irish Parliament from dealing with the Medical Acts of 1858 and 1886, and the Dental Act of 1878. His main object was to maintain the powers of the General Medical Council, especially in regard to examinations, the aim being to establish uniformity of qualification in both countries.—Mr. Birrell could not agree with the new clause. The medical profession in Ireland could very well look after itself, and it need not be feared that it would act in a retrograde manner.

The clause was defeated by 281 to 106—Government majority, 175.

Conviction of Bogus Practitioners.

On the 6th inst., at the Munster Assizes at Cork, before Mr. Justice Dodd, Patrick H. O'Shea, *alias* R. H. Graham or Graham Shee, H. Ellison and Michael Browne, were put forward (from County Tipperary, S.R.) and pleaded not guilty to the charge that they did conspire to cheat and defraud by false representations, etc., and did also obtain money by false representations on different days in different months in the present year.

Mr. M'Sweeney said the form of cheating was that the prisoners pretended to be qualified medical men and qualified dentists, and specialists in the treatment of disease, and by that means they obtained large sums. Quacks were entitled to practise so long as they practised as quacks. A quack could not hold himself out to the public as a qualified medical man. The conspiracy took place in the county of Tipperary, and the prisoners roamed all over the county, and the money they obtained was from poor farmers and others. When Ellison was arrested a number of letters were found in his possession. There was one letter written by O'Shea, a billiard-marker from Waterford, to Ellison, who was then in London. It stated:—"I have just returned from Tipperary and received several letters. . . . . I have made all ready for you and have engaged apartments, and men are already at work with the scheme. . . . . I believe I said in a previous letter that, like yourself, I am not fully qualified." He was not qualified—he was a billiard-marker from the Co. of Waterford. A series of letters passed, and ultimately, on July 13th in the present year, Ellison, whose address was 219 St. John's Road, Clerkenwell, arrived in Tipperary. He was originally a medical student—a chronic medical student, and when the police were first able to trace him in London he was in the employment of a man named Vine. When he arrived in Tipperary he had a card: "Henry Ellison, M.R.C.S., L.R.C.P." "This job will break up at any moment. . . . . Write by return and carefully seal letter. I will try and pack up in a week's time and keep my fare and hook it, as this is a fraud," Ellison wrote to his wife; "it is nothing but a swindling game. I have about fifty cases to serve; I do all the work and get sixpences and bobs—about two shillings, I can't afford boots. . . . . I leave here on Thursday next." The prisoners settled down in a public-house in Hollyford, in Tipperary. A series of cards were issued, and Mr. Shea, billiard-marker, became "Dr. R. H. Graham, Specialist in Dentistry. Painless extraction. Moderate prices." He appeared in another part as "Dr. R. H. Graham, Philadelphia Medical Institute." There was also another card: "Dr. Ellison, Specialist in the treatment of consumption, rheumatism, sciatica, wasting diseases." There was also an announcement of the "most wonderful discovery of the age for the treatment of sciatica, rheumatism and paralysis by hypodermic injections into the parts affected." Counsel said that beyond all doubt Browne knew about the swindle. He was hired by these people. This form of swindling was a danger to the public, and it could not be tolerated that billiard-markers and drapers' assistants should go about the country practising medicine.

Evidence was given in support of counsel's statement, and the jury returned a verdict of guilty against the three prisoners on the count of conspiracy to obtain sums of money by false pretences; they strongly recommended Browne and Ellison to mercy.

The prisoners were put back for sentence.

Longford Doctor's Sad End.

Widespread regret was caused in Longford by the sudden death on Sunday morning of Dr. Fredrick J. Myles, who was found that morning by his housekeeper lying dead on the floor of his bedroom. An inquest was held on Monday by Dr. V. Delany, Coroner for South Longford, when Dr. McCann stated that he was called in on Sunday morning and found Dr. Myles lying on his face on the floor of his bedroom. His nose was broken and there was an abrasion on the forehead, and, from all he observed, he believed that deceased, feeling ill when getting out of bed, had some sort of seizure and, having fallen on his face on the floor, death was caused by suffocation. The jury found that death was caused by suffocation, in accordance with the medical testimony, and added a rider expressing sympathy with the relatives of the deceased.

Libel Action by Irish Medical Man.

Last week, at Nisi Prius, Dublin, before the Lord Chief Baron and a city special jury, the hearing was resumed of the libel action in which Dr. Thos. Higgins is plaintiff, and Mr. Denis Shaughnessy, Co.-C., defendant. The alleged libels complained of are contained in a letter, alleged to have been written to the Athy Board of Guardians, complaining of the condition of the doctor's dispensary at Stradbally, charging him with receiving money from medical relief patients whom he was bound to attend free, and suggesting that medicine bottles supplied by the Board of Guardians were appropriated by the doctor to his own use.

After several days' hearing, the following questions were submitted to the jury and answered as mentioned:—

"(1) Did paragraph (a) of the letter mean that the plaintiff had been guilty of grave irregularities and serious violation of duty as medical officer?—Yes.

"(2) Did it mean that as such medical officer he made use of his position to extract fees to which he was not entitled?—Yes.

"(3) Did it mean that as a physician and surgeon he is unfit to be retained by the Board of Guardians of the Athy district as medical officer of the Stradbally Dispensary District?—No answer.

(4) Did the second paragraph (b) mean that the plaintiff was habitually guilty of violation of his duty as medical officer of the dispensary in refusing to supply bottles to dispensary patients entitled to free medicine, or compelling or requiring them to supply bottles at their own expense, although the plaintiff is supplied with bottles by the Guardians for the purpose of dispensing medicine?—Yes.

"(5) Did Mrs. Stone make the statements to the defendant mentioned in the portion of the letter of April 10th (marked a) from 'I issued visiting tickets,' to 'bottle every time'?—Yes.

"(6) Did the defendant honestly believe the said statements, and did he communicate said statements to the Guardians of the Athy Union in the *bonâ fide* discharge of his duty as warden and ratepayer, and in the belief that same were true and without malice?—The defendant honestly believed the said statements and ratepayer in the belief that some were true, but Union in the *bonâ fide* discharge of his duty as warden and ratepayer in the belief that some were true, but with malice on both sides.

"(7) If you answer 5 or 6 in the negative, assess the plaintiff's damages?—One farthing."

Upon these findings the jury found for the plaintiff with one farthing damages. The judge gave judgment for the plaintiff for one farthing, together with a further sum of one farthing for costs.

Royal College of Surgeons of Edinburgh—The Fellowship.

At a meeting of the College held on Thursday last, December 12th, the following gentlemen, having passed the requisite examinations, on October 11th last, were admitted Fellows:—

William Anderson, M.B., Ch.B., Fredk. A. F. Barnardo, M.B., Ch.B., Walter Waddell Carlow, M.B., Ch.B., Robert McLean Gibson, M.B., C.M., M.D., Wm. C. Grosvenor, M.B., C.M., M.D., Henry Fleming Hamilton, M.B., Ch.B., John William Hitchcock, L.R.C.S.E. (Triple Qual.), John Albert Lee, M.D., C.M., James Herbert Graham Robertson, M.B., Ch.B., Stanley Robson, M.B., Ch.B., M.D., C.M., Percy Alexander Ross, M.R.C.S.Eng., L.R.C.P.Lond., David Henry Russell, M.B., Ch.B., Norman Craig Shierlaw, L.R.C.S.E. (Triple Qual.), John Edward Llewellyn Simcox, M.B., Ch.B., William Percy Walker, M.R.C.S. Eng., L.R.C.P.Lond., D.P.H., and at the same meeting Arthur Robinson, M.D., Professor of Anatomy, University of Edinburgh, was admitted to the Fellowship.

NOTICES TO CORRESPONDENTS, &c.

☞ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

SUBSCRIPTIONS.

Subscriptions may commence at any date, but the two volumes each year begin on January 1st and July 1st respectively. Terms per annum, 21s.; post free at home or abroad. Foreign subscriptions must be paid in advance. For India, Messrs. Thacker, Spink and Co., of Calcutta, are our officially-appointed agents. Indian subscriptions are Rs. 15.12. Messrs. Dawson and Sons are our special agents for Canada.

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Small announcements of Practices, Assistancies, Vacancies, Books, etc.—Seven lines or under (70 words), 4s. 6d. per insertion; 6d. per line beyond.

Reprints.—Reprints of articles appearing in this Journal can be had at a reduced rate, providing authors give notice to the publisher or printer before the type has been distributed. This should be done when returning proofs.

A Graduate (Glasgow).—The latest official return of the population of your city is 785,600. The average death-rate from all causes during November was 18.1 per week.

LECTURES ON EUGENICS.

A course of six lectures will be delivered at University College by Professor Karl Pearson, F.R.S. (Galton Professor of Eugenics), Miss Ethel M. Elderton, Dr. David Heron, and Mr. W. Palin Elderton, on Tuesday evenings at 8 p.m., beginning on February 11. They will deal with the following subjects:—Heredity, Environment, and Parental Habits in their Relation to Infant Welfare; Heredity of Piebaldism and of Albinism in Man; the Relation of Fertility in Man to Social Value in the Parent; Some Points with regard to our Present Knowledge of Heredity in cases of Feeble-mindedness; the Mortality of the Phthisical under Sanatorium and Tuberculin Treatments; and Recent Studies of Heredity in Dogs, and their Bearing on Heredity in Man.

The course will be open to the public without fee, but applications for tickets should be addressed to the Secretary of University College.

Locum Tenens (Liverpool).—The ointment referred to is composed entirely of the hard and soft paraffins, coloured and perfumed to disguise its composition. The 2s. 6d. demanded for it is, of course preposterous, as its outside cost would be less than one penny.

INDIAN MEDICAL SERVICE.

The Government of India has sanctioned the introduction of "Organisation, Administration, and Equipment" as a subject in the examination of lieutenants of the Indian Medical Service for promotion to the rank of captain. This sanction will have effect from January 1st, 1914, to embrace all lieutenants whose commissions are dated January 28th, 1911, and those of any earlier batch who have not by that date completed their departmental examination for promotion. It has also been decided that lieutenants of the Indian Medical Service may be allowed to appear for their promotion examination on completion of one year's service.

Pater (Leeds).—The Livingstone College, situate at Leyton, Essex, prepares and sends out Medical Missionaries to the Tropics. Dr. Harford is the Principal, and it would be advisable to communicate with that gentleman regarding your son. Much valuable work has been accomplished, and students of the College are held in high esteem.

ST. BARTHOLOMEW'S HOSPITAL.

We are asked by the treasurer of St. Bartholomew's Hospital, Lord Sandhurst, to state that the generous response to the appeal to supplement the income of, and to extinguish a capital debt upon that institution, has averted the necessity of any immediate curtailment of the work of the hospital.

Further contributions are still required, but, in view of the help and encouragement received on all sides, it is hoped that the balance still required will be subscribed by the end of the present year, and our readers and especially the citizens of London are asked to give their aid to the attainment of this result. Subscriptions or donations may be sent to the treasurer at the Hospital, or to the Right Hon. the Lord Mayor at the Mansion House, and will be gratefully received and acknowledged.

Dr. F. S. (Yorks).—The fact of the absence of Altmann's granules from the cells of practically all cancerous growths affords a valuable microscopic test for the presence of malignant disease when it is possible to remove portions of the growth for examination.

Meetings of the Societies, Lectures, &c.

Wednesday, December 18th.

Royal Microscopical Society (20 Hanover Square, W.).—8 p.m.: Mr. F. Enock.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—Clinics:—2 p.m.: Throat Operations (Mr. Gillies). 2.30 p.m.: Children's Out-patient (Dr. T. R. Whipham); Skin (Dr. G. N. Meachen); Eye (Mr. R. P. Brooks). 3 p.m.: X-Rays (Mr. W. Steuart); Clinical Pathology and Pathological Demonstration (Dr. W. H. Duncan). 5.30 p.m.: Eye Operations (Mr. Brooks).

Thursday, December 19th.

Royal Society of Medicine (Section of Dermatology) (1 Wimpole Street, W.).—5 p.m.: Cases by Dr. Pringle and others.

North-East London Post-Graduate College (Prince of Wales's General Hospital, Tottenham, N.).—2.30 p.m.: Gynæcological Operations (Dr. A. E. Giles). Clinics: Medical Out-patient (Dr. A. J. Whiting); Surgical (Mr. Carson). 3 p.m.: Medical In-patient (Dr. G. P. Chappel). 4.30 p.m.: Lecture-Demonstration: Dr. G. G. Macdonald: Tuberculins.

Friday, December 20th.

Royal Society of Medicine (Section of Electro-Therapeutics) (1 Wimpole Street, W.).—8.30 p.m.: At the Middlesex Hospital, W. Short Papers will be read and Cases shown.

Society of Tropical Medicine and Hygiene (11 Chandos Street, Cavendish Square, W.).—8.30 p.m.: Dr. A. Castellani (Colombo).

Appointments.

Freshwater, Douglas H., B.C., M.D.Cantab., Physician to the Western Skin Hospital.

Haslam, Ivy E., M.D., B.S.Lond., M.R.C.P.Lond., Honorary Pathologist to the Warneford General Hospital, Leamington.

Kerr, Harold, M.D., Ch.B.Edin., D.P.H., Medical Officer of Health of Newcastle.

Lund, Herbert, M.B., B.C.Cantab., F.R.C.S.Eng., one of the Medical Referees under the Workmen's Compensation Act, 1906, for County Court Circuit No. 8 (Salford).

Vacancies.

Certifying Factory Surgeons.—The Chief Inspector of Factories announces the following vacant appointments:—Anstruther (Fife), Athy (Co. Kildare), Medbourne (Leicester), Widnes (Lancs.)

Wrexham Infirmary.—House Surgeon. Salary £120 per annum, with board, lodging and washing. Applications to Secretary, Frank Sisson, Esq., 7 Hill Street, Wrexham.

Somerset and Bath Asylum, Wells.—Second Assistant Medical Officer. Salary £135 per annum, with board, lodging, washing, and attendance. Applications to the Superintendent.

Laboratories of Pathology and Public Health.—Fourth Assistant Pathologist. Salary £170 per annum. Applications to the Secretary, Laboratories of Pathology and Public Health, 38 New Cavendish Street, W.

Hereford County and City Asylum.—Assistant Medical Officer. Salary £150 per annum, with board, lodging, washing, etc. Applications to the Medical Superintendent, Asylum, Burghill, Hereford.

Durham County Asylum.—Junior Assistant Medical Officer. Salary £150 per annum, with board, lodging, laundry, and attendance. Applications to the Medical Superintendent, Durham County Asylum, Winterton, Ferryhill.

Islands of Luing and Shuna, Argyllshire.—Medical Officer. Salary £150 per annum. Applications to G. A. Maclean Buckley, The Hall, Worth, Sussex.

Lancashire County Council.—Tuberculosis Officer. Salary £500 per annum. Applications to County Medical Officer of Health, County Offices, Preston.

Births.

Birkett.—On Dec. 13th, at Ortaquey, Southsea, the wife of H. J. D. Birkett, M.D., of a son.

Hair.—On Dec. 16th, at Wanlock, 31 Lampton Road, Hounslow, Middlesex, Jane, the wife of Allan Hair, M.R.C.S., of a daughter.

Maxwell.—On Nov. 29th, at 29 Dowsett Avenue, Southend-on-Sea, the wife of Dr. James B. Maxwell, of a daughter.

Thurlow.—On Dec. 12th, at "Easdale," Frant Road, Tunbridge Wells, to Dr. and Mrs. Basil Lyons Thurlow—a son.

Marriages.

Dick—Briscoe.—On Dec. 10th, at St. Michael's, Blackheath, Frederick Adolph Dick, M.B., B.S., second son of the late George Alexander Dick, and Mrs. Dick, of Blackheath, to Elizabeth, youngest daughter of the late Thomas Paul Briscoe and Mrs. Briscoe, of Blackheath.

Mitchell—Mason.—On Dec. 12th, at Christ Church, Morningside, Edinburgh, Major Arthur Henry McNeill Mitchell, R.A.M.C., Netley, elder son of the late Robert W. S. Mitchell, Esq., C.M.G., I.S.O., Emigration Agent, Calcutta, to Mary Stuart, younger daughter of the late J. Gordon Mason, Esq., Solicitor Supreme Courts, Edinburgh, and of Mrs. Gordon Mason, 1 Morningside Place.

Deaths.

Bartholomew.—On Dec. 10th, at 31 West Hill, Wandsworth, Alfred Aldam Bartholomew, L.R.C.P. and L.R.C.S.Edin., L.D.S., R.C.S.Edin., aged 52. R.I.P.

Cobbold.—On Dec. 11th, at The Elms, Batheaston, Bath, after long illness bravely borne, following appendicitis, Hugh Spencer Cobbold, only and much-loved son of C. Spencer Cobbold, M.D., in his 20th year.

Williams.—On Dec. 15th, at 2 Upper Brook Street, W., Charles Theodore Williams, M.D., M.V.O., F.R.C.P., Hon. Fellow of Pembroke College, Oxford, aged 74.

Winter.—On Dec. 14th, at Colchester, Katy, dearly-loved wife of Lt.-Col. T. B. Winter, R.A.M.C., Military Hospital, Colchester.

THE MEDICAL PRESS AND CIRCULAR

"SALUS POPULI SUPREMA LEX."

VOL. CXLV. WEDNESDAY, DECEMBER 25, 1912. No. 26.

NOTES AND COMMENTS.

The Great Refusal.

THE medical profession has stuck manfully to its guns, and at last Saturday's momentous meeting of the representative body of the British Medical Association the following resolution was carried by an overwhelming majority amid scenes of the wildest enthusiasm :—"That this representative body reject the proposals of the Government and adhere to the previous decision to decline service under the Act." The meeting had previously adopted a resolution to the effect that the latest regulations and the conditions of service are "in the best interests of the public and the profession, unworkable and derogatory." The public first, be it noted. Mr. Lloyd George's great scheme, beneficent as it might have been had the medical provisions been wisely and practically considered, now crumbles to dust like the Dead Sea apple. In spite of the few dissentients who have elected to cast themselves under the wheels of this Juggernaut Act, it is in the highest degree improbable, or rather it is impossible, that the medical benefits can now be administered as originally intended by the framers of the Act. The solidarity of the representatives of the Association is such that a resolution was also adopted that whatever the decision of the meeting, the minority agreed to acquiesce in the finding of the majority. These decisions come as an effective and crushing response from the medical profession which has slowly been awakening and now has at last arisen, giant-like, and conscious of its strength. This power, thus collectively asserted, must now be organised at once to form a Public Medical Service under its own control.

A Diploma in Psychological Medicine.

THE demand for a one-portal system has been before the medical profession for many years, but, nevertheless, the creation of new qualifications goes on apace. Of late years various Universities have come upon the scene and have contributed to the number of qualifying corporations. Within the experience of the present generation a diploma of public health has been obtainable at many of them, and it has been adopted almost without exception as a necessary condition of holding a public health appointment. A diploma of tropical medicine and another of ophthalmology have recently been created, and this is now followed by a diploma in psychological medicine, granted by the University of Cambridge. Medical men of two years' standing, who have had special clinical experience of insanity, are admitted to the examinations. The latter are divided into two parts, the first dealing with the anatomy and physiology of the nervous system, and a practical and oral examination in psychology. The second part embraces neurology, psychiatry, lunacy law and asylum administration. The examination will be held in June or July of each year, and there will be a fee of six guineas for each part.

A Cambridge View.

THE specialisation of various branches of medical science obviously leads to an accumulation of technical knowledge of a high order. In some cases the student is unable to gain an adequate grasp of a given subject, owing to his want of training in subsidiary studies. To remedy that state of affairs is, above all things, the function of a university, or, for that matter, of any organisation that aims at a systematic scientific education. Clearly the proper time for the alienist to acquire a sound knowledge of psychiatry and neurology is before he assumes the varied and exacting duties of asylum work. There is much, then, to be said in favour of the view of the Cambridge authorities that an examination in psychological medicine and its cognate subjects, if established, could not fail to raise the present standard of efficiency in applicants for asylum posts, and that it would lead to the provision of appropriate courses for the training of those who wish to advance our knowledge of psychiatry. They believe that the legislature would quickly come to recognise the diploma as a qualification which must necessarily be held by all medical officers of public institutions for the insane, and as desirable for public medical officers of education, Poor-law, prisons, and so on. Any of our readers requiring further information should communicate with Dr. C. S. Myers, the Psychological Laboratory, Cambridge.

Sweated Medical Officials.

AT the present crisis in medical affairs, it is interesting to note that, in its dealings with our profession, the State has always obtained as much as possible in return for little or nothing. The gratuitous death certificate affords an apt example, and an even more contemptible one is the gratis birth certificate instituted by Mr. John Burns, under stringent penalty. Why should not a parsimonious administration, anxious to obtain necessary service at other people's expense, demand services of an equivalent kind from the lawyers? Then, again, the pay for many Poor-law appointments is scandalously inadequate, and it is only of late years that Government has interfered to protect its medical officers. There could be no more flagrant instance of petty injustice than that which forbids Poor-law medical officers from receiving fees for giving evidence in coroners' and other courts. The object is clearly to save the ratepayers' money at the cost of the sweated medical official. What guardian, we wonder, would forego his fees if called upon to appear as a witness in a workhouse case? Many other instances of Government "sweating"—there is no other word in the English language that conveys our precise meaning more crisply—might be cited, but there is no need to enumerate grievances that are written indelibly in the history of medicine in the United Kingdom.

The Wail of the Official Vaccinators. UNDER a somewhat different category falls an official complaint made to Mr. John Burns, President of the Local Government Board, by the official vaccinators. Their complaint is one of seriously reduced income. Under the old Act of 1898 exemptions were granted only on the signature of two magistrates, but under the Act of 1907 all that was altered, and now an applicant has merely to ask for and obtain an exemption from a magistrate. The results of this increased facility are striking. In 1906, before the new Act, the total exemptions were 53,828, in 1910 it had risen to 230,947, and in the first half of 1911 to 119,335. Since every such exemption means a loss to the vaccination officer, it is clear that the total reduction of his income must be considerable. When questioned in the House, Mr. Burns replied that out of 1,420 vaccination officers 487 have, it is alleged, suffered loss, but the case has been met by the payment of a gratuity by their boards of guardians. To this the Vaccination Officers' Association reply that they have investigated thirty cases where gratuities had been granted, and find they amounted to £513 18s. 2d., against a gross loss of £1,988 18s. 8d. If vaccination be necessary for the nation, this is bad news. Mr. John Burns has never shown himself a friend either of compulsory vaccination or of the medical profession. Now that the Government has fallen out with the doctors, the intervention of the ancient god Nemesis may be awaited with some amount of interest and curiosity.

LEADING ARTICLES.

SMALL HOSPITALS AND THE INSURANCE ACT.

THE future of the voluntary medical charities under the operations of the National Insurance Act presents a problem of considerable importance to various interests. It must be at once recognised that the Act provides with medical service and physic a vast number of persons of the class who have hitherto been accustomed to resort to the hospital for assistance of that kind. As a portion of the premium is paid by the insured persons, it is hardly likely that they will in future accept as a charity that which they are entitled to demand as a right. According to Mr. Lloyd George, those who need specially skilled advice will continue to visit the hospitals. Last week, in reply to a deputation of the chairmen of some of the larger London hospitals with attached medical schools, he made certain statements that deserve close attention. He contended that the main work of the hospitals is untouched by the Act, as medical men attending the insured do not cover the same kind of treatment as that of a hospital. Insured persons would still require hospital in-treatment and, to a less extent, out-treatment, and the claims of the charities upon private benevolence would continue the same. The Government had left the hospitals out of the scheme rather than imperil their voluntary nature, as any subsidy from public funds would be followed by public control. He further contended that the Act would ease the finances of the hospitals by relieving them of a number of out-patients, and of those in-patients who, from sheer poverty, were unable to have home treatment. Then came the sting of the speech of the Chancellor of the Exchequer. He remarked that if there were any trouble it would be because some extremists wish to boycott or, at least, to differentiate against insured persons. According to his view, the perils underlying any such policy were three; first, the hospitals in many cases were chartered institutions, and such charters were open to revision; secondly, public generosity would be checked if any case of neglect were proved; and, thirdly, hospitals were under Royal patronage and assistance, which could not be engaged in acute controvery with the wage-earning classes. As regards the threat thus implicitly stated, it is likely to be absolutely futile so far as ninety-nine out of every hundred members of the honorary staffs of hospitals who have signed a pledge not to attend insured persons under the Act under existing conditions. Mr. Lloyd George will find the hospital question is not to be swept curtly aside, any more than the general practitioner is to be dragooned, bribed, bamboozled and ignored at the whim of an astute politician. It is safe to say that the loss of hospital charities, of eleemosynary gifts and of Royal patronage, even supposing any or all of these things were to follow a combined hospital protest against injustice, would not for a moment cause a single consultant or specialist to waver. Did Mr. Lloyd George realise the common social influence of the medical profession he would probably become more sparing of his stage thunder. How can he justify the handing over to unpaid consultants a considerable proportion of the vast burden of insured persons for whose sick treatment the State has become responsible? There is another aspect of the case which has a profound bearing upon the interests of the community. The large hospitals only were represented in the deputation to the Chancellor. What about the small and special hospitals? It is to the special hospitals that we owe a great, if not the greater, part of our advances in medical science. Many of these special hospitals existed long before there were any special departments attached to the large general hospitals. Are these small hospitals, with their fine traditions, with their organised special work, with their accumulation of experience, and in some instances with finely equipped laboratories, to be swept out of existence for the paltry reasons assigned by the Chancellor of the Exchequer? If so, their loss to scientific medicine and to the service of the public would be heavy and irretrievable. Of late years the medical charities of the Kingdom generally have come more or less under the control of certain large distributing agencies or Funds. In London the policy of these directing agencies has been that of open and avowed hostility to the small hospitals. The professional philanthropists who practically control the Funds have nothing to gain from the smaller institutions, whereas the larger ones connote social prominence, titles, and the direction of enormous financial interests. It is to be hoped, however, that the State will not drift into the fatal blunder of permitting the special hospitals of the United Kingdom to be starved out of existence. A statesman of the calibre of Mr. Lloyd George would act more worthily were he to address himself seriously to the task of readjusting the relations of the hospitals, small and large, to the fresh conditions imposed by his all-perlexing Act. The wiser plan would be at any cost to endow all hospitals, large or small, and if necessary to accompany the gift with certain conditions that would neither degrade nor unnecessarily hamper the service of the medical profession. The fallacy of gratuitous service hangs like a millstone round the neck of the honorary staff of the voluntary medical charities. The system is rotten to the core, and were it to be swept away in the case of the hospitals, as it has been in the case of Parliament, the medical world would be well rid of a burden that is often bitter, and always economically unsound.

CURRENT TOPICS.

Christmas Fare and Health.

At this season of the year when jollity and good fellowship seize the reins and guide the social chariot out of the ruts of work and formality into the smoother ways of leisure and ease, one cannot help wondering how the national health will be affected as a result of the enriched diet consumed by all classes. It is no exaggeration to say that millions of people, even the poorest, will partake of what is to many the crowning meal of the year, the Christmas dinner. Turkey, roast beef, plum-pudding and mince-pies are not likely to be superseded as seasonable foods, and when these articles are more than duplicated, as they are in many households, the Christmas feast is repeated and kept up in a modified degree, for the best part of the week. Except in the case of the very poor this surfeit of rich diet, especially in carbohydrates, might be expected to bring some extra work to medical practitioners, and yet the records of men in busy general practice show little if any increase from this cause. This would indicate that greater temperance in eating, as in drinking, is becoming more universal. As a matter of fact, much greater time is allowed than usual for the digestion of Noël fare, for people have not to rush away from the table to catch trains. It is this atmosphere of calm and enjoyment, combined with the all-pervading sense of good cheer, that goes to make Christmas a healthy season rather than the reverse.

The Asylums Board and Medical Education.

At the last meeting of the Asylums Board an interesting report from a Sub-Committee was presented on the part the Board has long taken in medical education in London, and a claim was made for representation, in connection with other public authorities, on the governing body of the University of London. The report points out that classes have been established in the Board's hospitals for the clinical instruction of students, and a certificated course of study in a fever hospital has been made part of the five years' curriculum of every medical student entering the profession. Over 6,500 students have completed the course in the Board's hospitals. Facilities have also been provided by the Board for the study of smallpox by medical men and medical students when a sufficient number of cases of that disease has been under treatment in their hospitals. In addition they have, within the past few years, instituted classes for the instruction in hospital administration of qualified men who are desirous of taking the Diploma in Public Health. In connection with research work it has been resolved to appoint a research bacteriologist. The Board has resolved to request the Royal Commission on University Education in London to consider the question of recommending that the Board should be given representation on the Senate of London University.

The Scarlet Woman.

The British Committee of the International Abolitionist Federation has just published its correspondence with the India Office on "Our Army in India and Regulation of Vice," in which the Government is accused of granting official recognition to prostitution, and thereby encouraging vice. It appears that in many cantonments the periodical examination of women has been permitted, and that brothels for the use of soldiers are not only permitted in cantonments, but are placed under some sort of medical control. The committee holds that there are two main grounds for objection to the system—one that a class of women are placed outside the law, treated as suspects, and differentiated from the men who are necessarily their accomplices in the conduct concerned; and, secondly, that the system affords a positive encouragement to vice by giving it Government recognition and protection. The whole question is a very vexed one. The Army wants an efficient fighting machine. It finds that its men can resist everything except temptation, and that they are specially prone to succumb to feminine seduction. It finds that this weakness of the soldier, which it cannot prevent, is the direct cause of a great deal of sickness and inefficiency, and accordingly takes effective steps to prevent this. That these measures may inflict hardship on the harlot is beside the point. She knows that infection means expulsion from the cantonment, and that this is part of her ordinary trade risks. If we can omit the purely moral point of view the Army's action is logical and laudable. But the moralist is not to be denied. He lays down that prostitution is unnecessary and disgraceful, and that for a Government to recognise its existence and lessen its risks is subversive of all morals. As a mere matter of history, however, the harlot has flourished in spite of all the repressive measures that have at one time or another been enforced against her. The prostitute is certainly a problem, but removing some of the risks of her calling is not likely to increase her *clientèle*—and it will undoubtedly lessen the amount of pain, suffering and deformity which are now the lot of her accomplices. One cannot deny, however, that official control implies, if tacitly, official sanction.

Simplex Munditiis.

St. Paul exhorted us to do everything decently and in order, and ever since then women have been tidying our desks. We leave our papers, pens, and hypodermic needles lying about where we can get them in a picturesque seeming confusion, whose chief beauty lies in its unstudied practicability. We really know where things are when we want them, although it would admittedly be far from easy to describe their exact location to the casual outsider. Then, one day, when we are a "prey to hastening ills" and want something quickly, we find our precious possessions have been "tidied." Parallelism tempered with symmetry is pathognomonic of the feminine touch. The edges of everything must be parallel with the edges of everything else, and neat pyramids are formed by the simple process of putting everything on something bigger. This craze for the rectangular parallelogram is one of our essential human characteristics. It is intensely finite. The paths of the planets are awful curves, but a dropped halfpenny falls in a straight line. A short enough bit of any curve is straight, and it is our limited outlook that makes us worship the straight line and its dreadful corollary the right angle. The corners in our rooms are right-angled for no conceivable reason, and the figures of the second book of Euclid and those of our smartest women can be drawn with the aid of the same simple ruler that suffices for the plotting of the work of our most esoteric cubist painters. The Greeks saw the danger of such practical rectitude and subtly curved the columns of the Parthenon. Chinese roofs have gently upturned edges that suggest a smile and give a sense of light insecurity, but that is certainly better than our slated plain superfices. Any curve is more easy to live with than a line whose only merit is that it is the shortest distance between two points.

The New Deptford Consumption Dispensary.

The first municipal dispensary in London for the treatment of consumption was opened last week at Deptford. The house and land have been presented to the borough as a memorial of his year of office by Mr. E. Mumford Preston, the ex-Mayor, who has also fitted up the institution. It begins its work at once with a staff of one whole-time medical officer, and three qualified female health visitors. Though the gift of the building is due to a single donor, the Deptford Council had already decided to establish such a dispensary, and they will now maintain it out of municipal funds. The compulsory notification of pulmonary tuberculosis placed a valuable power in the hands of authorities, and Deptford is now in a position to take all measures to prevent the spread of the disease. The direct control of the health authority over the dispensary has many advantages. The whole organisation will be carried out under the control of the medical officer, so that the necessary following up of cases and finding out "contacts" are made possible. Preventive measures also can be best carried out under the constant supervision of qualified health visitors. Another advantage is that the continuity of the work is preserved. Voluntary dispensaries cannot give the same guarantee of continuity as is possible where the health authority has charge. There are no beds in the new dispensary. Its function is that of a clearing house, and it is intended to be the local information bureau, where guidance may be sought by anyone. The authorities of Deptford intend to make the new dispensary the local centre of activity in the treatment and prevention of consumption, and they will invite patients from all agencies, social, charitable, or religious.

Food Adulteration.

The second part of the report of the Local Government Board for the 15 months ending March last, is now issued. It deals among other things with adulteration of food. It forms a dismal exposure of one part of the seamy side of trade, of that form of commercialism that reckons everything "good business," by which money can be made so long as it does not involve the danger of adequate punishment. Magistrates very rarely inflict more than small fines, even in cases of serious adulteration, and this fact deters local authorities from taking even the grossest cases into Court. The Justices are now being reminded of their duty in this matter by a circular from the Home Office. In the case of milk the fact that the lives of the very young and the very old largely depend upon a pure supply does not deter dealers from deliberately carrying on a deadly system of fraud. Out of 50,849 samples 11.9 per cent. were reported as adulterated, or as failing to reach the minimum limits. Samples informally taken have been found to have had from 30 to 70 per cent. of their fat abstracted. One analyst states that the contrast between the quality of the milk collected in the ordinary formal manner and that taken without formalities is very startling and shows that concealed adulteration is rampant. Among other instances reported are cases of milk treated with annatto in order to give it colour, and with boric acid and formalin to prevent the discovery of decomposition. Margarine is still substituted for butter; dyed cane sugar from Java is sold as Demerara sugar, and salicylic acid is added to wine. Baking powder has been found to contain sulphate of lime, and shredded beef suet to consist partly of oatmeal or cornflour. So-called "cider" consists often solely of coloured, flavoured, and aerated sugar solutions, entirely innocent of any relation to apples. The revelations with regard to the traffic in "screw" or "slink" meat are equally deplorable. Slaughter in public abattoirs under inspection is nowhere enforced, and diseased animals are slaughtered outside towns, often at night; the carcases are cut up and the meat is brought into market in pieces from which portions that might indicate disease have been carefully removed. It is hopeless to look for any immediate abatement of these evils. New legislation is necessary to ensure enforcement of the law, and to make penalties severe enough to be really preventive.

The New Milk Bill.

Since our previous paragraph was written there has been published the text of Mr. John Burns's new Bill for the "Regulation of the Sale of Milk." If it becomes law this Bill promises at least to mitigate some of the existing evils and abuses. The Bill gives power to local authorities in populous districts to establish depots for the sale of milk specially prepared for infants under two years of age. The authorities will have power to purchase and prepare the milk and provide such laboratories and plant as are necessary. This applies to districts with a population of 50,000 and upwards, but other districts with a population of not less than 10,000 may also be invested with the same powers on application to the Local Government Board. The Bill also provides for more effective registration of all dairymen and dairies and for inspection of dairies and examination of cows by the local medical officers. In cases where the medical officer is of opinion that infectious disease is caused, or is likely to be caused, by the consumption of the milk from any dairy he is to have the power to make an interim order prohibiting the supply pending the decision of the local authority. Dairymen disputing the need of an order confirmed by the local authority are to have the right to appeal to a Court of Summary Jurisdiction. A person selling milk which has been declared to be tuberculous and the sale of which has been prohibited by such an order is to be liable to a penalty not exceeding £10.

The Plight of the Hospitals.

The deficit of £50,000 in the annual income of the King Edward's Hospital Fund for London last year, which was announced at a meeting last week to award the grants to hospitals, convalescent homes, and sanatoria, may be regarded as a sign of the times. It is difficult not to connect the staunching of the flow of public charity with recent legislation, in spite of the guarded optimism of the officials of the Fund. The King, who is the Patron of the Fund, with his characteristic sympathy, has caused a letter to be written to the presiding governor, in which His Majesty expressed his regret to see the diminution in income from subscriptions and donations and that he would look upon any reduction in the total grants as a calamity. This feeling must be shared, directly or indirectly, by all who are interested in the welfare and security of our great voluntary hospitals, not only in London, but also up and down the country. Most, if not all, of the authorities of these institutions view the coming year with much apprehension, on account of the uncertainty as to the effect of the Insurance Act upon their income and administration. Whether State endowment is to be the remedy for the unsatisfactory financial condition of the hospitals remains to be seen. There appears to be no reason, should such a system ultimately be adopted, why the streams of philanthropy should cease altogether, even though they would be somewhat attenuated.

The Psychologist in the Schools.

The recent appointment of a scientific layman as a half-time psychologist in the education officer's department of the London County Council for a period of three years is another evidence of the progressive character of the work of that body. We gather that part of the duties of this new official will be to assist the headmasters of the Council's schools in the detection of mentally deficient children, as well as to study the habits and characteristics of school children generally from the psychological standpoint. Experimental psychology is closely allied to mental physiology and mental medicine; indeed, it is difficult to imagine either of these subjects being separated from the other, in theory or in practice. Nothing can be said against the scientific attainments of the gentleman appointed, Mr. C. L. Burt, who is lecturer in experimental psychology in the University of Liverpool and the author of several valuable papers upon this science, some of which have been read before the British Association. At the same time it may be urged that some of the problems that present themselves in the case of mentally defective children have such an intimate relationship with general medicine, that only those who have had a complete medical training would be in a position to deal with them adequately. No doubt those medical officers on the staff of the London County Council who have alienist experience will be available for consultation in any case of difficulty that may arise. It will be interesting to watch the development of this new scheme.

PERSONAL.

Miss Eleanor Davies-Colley, F.R.C.S.Eng., has been appointed Surgical Registrar to the Royal Free Hospital.

Dr. T. Lewis, M.D., B.S.Lond., M.R.C.P., has been appointed assistant Physician to University College Hospital.

Mr. W. Girling Ball, F.R.C.S.Eng., has been appointed Surgeon to the City of London Truss Society for the Treatment of Hernia.

Mr. W. D. D. Small, M.B., Ch.B.Ed., has been awarded the Stark Scholarship in Clinical Medicine in the University of Edinburgh.

Mr. Donald Armour, M.B.Toronto, F.R.C.S.Eng., has been appointed Honorary Consulting Surgeon to the Blackheath and Charlton Hospital.

Dr. Robert Burnet, Medical Officer of Health for Cornwall, delivered an instructive lecture last week in Truro Town Hall, on "The Public Health of the County."

Sir William Osler, Regius Professor of Medicine in the University of Oxford, was the recipient last week of the Honorary Degree of D.C.L. of the University of Durham.

Dr. N. J. Turrell, M.D., B.Ch.Oxon., has been appointed Honorary Physician-in-Charge of the Electro-therapeutic Department at the Radcliffe Infirmary and County Hospital, Oxford.

Prof. William Bateson, M.A., D.Sc., F.R.S., Fullerian Professor in Physiology, will deliver a course of lectures on "The Heredity of Sex and some Cognate Problems" at the Royal Institution, on Tuesdays, at 3 p.m., commencing January 14th, 1913.

Mrs. John Hall has given £500 to the University in memory of her husband. The income will provide each year a gold medal to be awarded to the student who does best in the subject of pathology at the examination for the degrees of M.B., Ch.B.

Dr. R. de la Poer Beresford, who is shortly retiring from active medical practice, claims to be the senior public Medical Officer of Health in England and Wales. With the exception of one year, when he acted as Mayor of the borough, he has been Medical Officer of Health for Oswestry for 44 years.

Dr. H. Macean, M.D., M.Sc., an internal student of the Lister Institute of Preventive Medicine, has been awarded the D.Sc. degree in Bio-Chemistry of the University of London for his thesis entitled "A Contribution to the Study of Lipoids—(i.) The Phosphatides of the Kidney. (ii.) On the Purification of the Phosphatides," and other papers.

At the Royal Bethlem Hospital the following honorary consulting appointments have just been made:—Surgeon, Mr. Arthur H. Evans, of Westminster Hospital; Aurist and Laryngologist, Mr. William M. Mollison, of Guy's Hospital; Ophthalmologist, Mr. John F. Cunningham, of the London Hospital; Gynæcologist, Dr. Thomas G. Stevens, of St. Mary's Hospital; Anæsthetist, Mr. Cecil Hughes, of Westminster Hospital.

A CLINICAL LECTURE

ON

THE SELECTION OF CASES OF PULMONARY TUBERCULOSIS FOR INSTITUTIONAL, DOMICILIARY AND DISPENSARY TREATMENT UNDER THE NATIONAL INSURANCE ACT. (a)

By H. E. SYMES-THOMPSON, M.A., M.D.Cantab., M.R.C.P.Lond.,

Assistant Physician to the Royal Hospital for Diseases of the Chest, London.

THE selection of cases for different forms of treatment presupposes a knowledge of the varieties of treatment which are in view. If, therefore, it be taken for granted that we are familiar with the work of the different establishments for the treatment of tuberculosis it would appear that my task is simply to indicate the different types of case best suited for each form of treatment. But the issue has been complicated by the passage through Parliament of the National Insurance Act. As a result of the part of the Act referring to tuberculosis certain terms, such as hospital and infirmary, gain an altered significance, and the word Sanatorium is used in a broad, and also in a restricted, sense.

The National Insurance Act provides a special organisation for the control and treatment of pulmonary tuberculosis among insured persons, and it is intended eventually to embrace the dependents of insured persons also. The part of the Act dealing with tuberculosis is called "Sanatorium Benefit." This is an unfortunate term, for it comprises measures for the treatment of tuberculosis whether they be institutional (in a sanatorium, a hospital, or a home for advanced cases), or domiciliary (in the patient's home), or at a dispensary. "Sanatorium Benefit," therefore, does not mean sanatorium treatment only, but the treatment of tuberculosis in the manner and at the place which is considered best for each particular patient.

The object of "Sanatorium Benefit" is to develop a system which will be an efficient engine for the treatment of tuberculosis among the industrial classes, and for diminishing the incidence of the disease—the ultimate aim being the eradication of tuberculosis.

The treatment up to now has fallen under three main heads:—

(i) *Domiciliary or Home Treatment.*—Many of the patients undergoing this form of treatment have been doing more or less work. The doctor has done what he could in the home. He has improved the hygiene and supervised the diet and the medicinal treatment.

(ii) *Sanatorium Treatment.*—The number of sanatorium beds has been limited, and, as the doctors have had, as a rule, no special experience of the disease, the wrong type of case has often been sent to the sanatorium, so that comparatively little use has been made of the beds.

(iii) *Infirmary Treatment.*—The value of this form of treatment has also been reduced owing to the fact that the infirmary has the stigma of the workhouse; and patients in many cases have refused to go.

Thus it is that each of these forms of treatment has left much to be desired. The practitioner has had to give domiciliary treatment to many cases which would have been more advantageously treated in the sanatorium or the infirmary. The sanatorium beds have been largely filled with cases which could receive no permanent benefit. And the infirmary has too often opened its doors in vain to suitable cases. In addition to these disadvantages there has been no central authority governing the whole, and the net has had such large meshes and "lacunæ" that many patients have slipped through and undergone no treatment at all.

The aim of "sanatorium benefit" is to adopt the good points of the old system and to develope its scope. The new arrangements will provide one scheme under a common management, and each part will be correlated and interdependent. All patients suffering from tuberculosis will be under treatment, and each one will be undergoing the particular form of treatment best suited to his case.

Such a large proportion of unsuitable cases have been sent to sanatoria that it is now recognised that an expert must be secured to select suitable cases. The practitioner of the future will have still greater difficulties to face, for it will not be sanatorium cases only which he will have to select, but he will have to classify all the cases and decide between several forms of treatment in each instance. If the practitioner has failed in the selection of sanatorium cases, the situation would become more unsatisfactory still if he were called upon to decide on the treatment for all cases. Owing, then, to the technical nature of the work and as special experience is necessary, it is proposed to hand over the selection of the cases to experts.

Before proceeding to indicate the different parts of the new scheme we must guard against two possible misconceptions. Firstly, the hospitals to which I shall refer will be situated all over the country, so that hospital beds for tuberculous patients will be available in every locality. In this connection we must dismiss from our minds the hospitals as we know them, although they may do the work in their particular areas. The second possible misconception is the position of the "infirmary." In the national scheme the infirmary will be represented by the "special hospital for advanced cases." But as the word "hospital" will be used for another institution, I propose to refer to these establishments as "Homes for advanced cases." The infirmary will continue to exist, but its use will be confined to Poor Law cases.

With these provisos I will indicate the functions to be subserved by the different elements of the national scheme for the treatment of the disease, and we will suppose that we are dealing with some particular district and that the country has been divided up into similar districts with similar facilities.

The Dispensary is the central unit. To it, all cases or suspected cases of pulmonary tuberculosis are sent in the first instance. Here an expert is seen, and so there is a greater probability of an early diagnosis being made than would be the case if the patient had gone to the general practitioner. The dispensary being the distributing centre, it is linked up with a hospital, a sanatorium and a home for advanced cases, and from it patients can be referred to general practitioners for domiciliary treatment. We have in the dispensary not only facilities for early diagnosis, but also, by reason of its executive position as the central pivot for treatment in all its branches, the advantage that the patient may be at once transferred to the particular form of treatment best suited to the individual case at the moment at which he presents himself. There is also the preventive side of dispensary work, in which the "contacts," that is to say the immediate families of the patients are examined with a view to the discovery of the disease in an early stage.

(a) Delivered at the Royal Hospital for Diseases of the Chest, December 12th, 1912.

You will notice that a dispensary is like an out-patient department at a chest hospital in that an expert is seen, and in that it is in connection with a hospital and with sanatorium beds. But it differs from such an out-patient department in that tuberculosis is the only disease treated, and in many other particulars which will occur to you. Moreover, there will be dispensaries all over the country, whereas the chest hospitals are few.

The Sanatorium.—The majority of the cases suitable for sanatorium treatment are the early cases when the fever has subsided, and the chronic afebrile cases. Another suitable class is that in which there is mixed infection—when there are other organisms as well as tubercle bacilli in the sputum. At the sanatorium these secondary organisms usually rapidly disappear so that tubercle bacilli alone can be discovered in the sputum. The non-appreciation of this fact has probably been the cause of much waste of time and energy in the preparation of vaccines for the treatment of secondary organisms.

The Hospital (for in-patients).—The patients to be sent to hospital divide themselves into three main heads:—

(i) Those cases in which we are not sure whether we are dealing with incipient pulmonary tuberculosis or some other disease. If they prove, on investigation, to be tuberculous they are sent to the sanatorium.

(ii) Cases of active disease with an amount of lung involvement ranging from a moderate to an extensive degree, provided that the constitution is not undermined. If they take a favourable course —*i.e.*, if after a week or so in bed the temperature and the pulse-rate fall to normal or nearly so, the patient is transferred to the sanatorium. If, on the other hand, the case proves to be a progressive one and the disease spreads, the patient is transferred to the home for advanced cases.

(iii) Cases with acute complications, such as Pleurisy, Hæmoptysis and Pneumothorax. If the patient does well the case becomes one of simple uncomplicated pulmonary tuberculosis and is transferred to the form of treatment best suited to his particular case.

The Home for Advanced Cases.—Under the new scheme special homes will be set apart for advanced and progressive cases, in which the constitution is undermined. The chief purpose of these homes is to segregate patients, who would otherwise become sources of infection to their families. The importance of these homes will be realised when we remember that many of the patients with advanced disease are expectorating millions of tubercle bacilli every day. The large majority soon die, but a few improve under treatment and are sent to the sanatorium, where the disease may eventually even become quiescent.

Domiciliary Treatment, or treatment in the patient's home. Patients for this treatment comprise:—

(i) Certain cases referred for Domiciliary treatment by the dispensary. These will generally be in an early stage, and present a high degree of resistance to the disease.

(ii) Those who are waiting for beds at the sanatorium, the hospital, or the home for advanced cases.

(iii) Those who have left the sanatorium and in whom, though the disease is quiescent, we are not sure that arrest has taken place. Under this head would fall patients with arrested disease—*i.e.*, those who have had pulmonary tuberculosis in the past—perhaps twenty years previously—and who have regained their health. Such patients would report themselves to the doctor at regular intervals.

As patients undergoing Domiciliary treatment are continuously under observation, they can be sent at once to the hospital or the sanatorium, as the case may be, should any exacerbation of their disease take place.

(The lecture was illustrated by patients exhibiting different types and stages of the disease.)

Note.—*A Clinical Lecture by a well-known teacher appears in each number of this Journal. The lecture for next week will be by George Thompson, L.D.S., M.R.C.S., Hon Dental Surgeon at the Royal Hospital for Diseases of the Chest. Subject: "The Teeth in Relation to Pulmonary Tuberculosis."*

ORIGINAL PAPERS.

THE NEUROLOGY OF THE VISUAL SYSTEM.

A Short Series of Original Papers.

By HARRY CAMPBELL, M.D., F.R.C.P.,
Physician to the West End Hospital for Diseases of the Nervous System.

PAPER V.—*Concluded.*

Abnormalities of the Pupils.

The pupils may be abnormal in regard to:—

(*a*) Size and shape.

(*b*) The Light reflex.

(*c*) The accommodation reaction.

(*a*) *Abnormalities in Respect of Size and Shape.*—The pupils may exhibit marked contraction (miosis), marked dilatation (mydriasis), rhythmic alterations in size (hippus), inequality of size (anisokoria), irregularity (non-circularity) of their free border, and eccentricity.

Miosis.—When not due to adhesions, miosis results from spasm of the irido-constrictor. This is mainly due to an excessive innervation through the third nerve, in only a minor degree to a deficient innervation through the sympathetic. So-called "spinal miosis" has been (probably falsely) attributed to a blockage of sympathetic impulses from disease of the posterior spinal roots of the lower cervical cord. In this way Erb explained the miosis of tabes dorsalis.

Miosis is observed as the result of:—

Gross irritative lesions of the third nerve (*e.g.*, from basal meningitis). Paralysis of the sympathetic (*e.g.*, from tumours of the neck, pachymeningitis cervicalis, syringomyelia, disease in the upper part of the thorax.

The action of miotics—*e.g.*, morphine, eserine, pilocarpine, chloroform, and certain autogenetic toxins—*e.g.*, those of uræmia.

Senility.—One-fourth of the aged have decided miosis. In such the pupils remain powerfully contracted under the influence of moderate light. Small in the morning, they get much larger in the duller light of the evening. The reactions both to light and to accommodation are sluggish in senile miosis. They should be tested in a dark room.

Acute Diseases of the Eyes Causing Photophobia. —In most acute diseases of the eyes the pupils tend to be small, and the miosis is generally associated with photophobia. Here the spasm is obviously protective.

Syphilis (cerebro-spinal lues, tabes dorsalis, general paralysis).—This is the commonest cause of miosis. In tabes miosis is sometimes very pronounced and gives the eyes, especially when blue, a characteristic appearance, owing to the large amount of iris showing. It may precede the Argyll Robertson phenomenon. Not only in tabes, but in general paralysis of the insane and in cerebro-spinal lues, miosis may occur in association with the Argyll Robertson pupil. When optic atrophy supervenes in such cases the pupils do not undergo the dilatation which ordinarily follows upon optic atrophy. Tabetic miosis is in some way related to the retention of accommodation contraction, for when, in a tabetic patient presenting the Argyll Robertson pupil with miosis, the pupil loses the power of accommodation contraction, the miosis disappears.

Organic Disease of the Brain.—In lesion of the pons the pupil may be small. Also in concussion.

Hysteria.—It is doubtful whether miosis occurs in hysteria, except in connection with semi-voluntary spasm of the internal recti, giving rise to accommodation contraction of the sphincters, or as the result of forcible contraction of the orbicularis palpebrarum (orbicularis phenomenon).

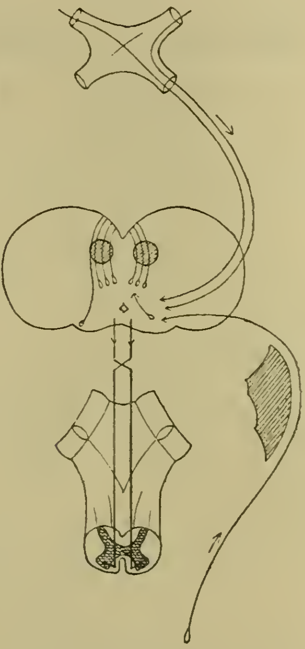

Fig. 31.—Diagram showing some of the connections of the superior colliculi. The brain stem is seen in horizontal section, while the medulla and cord are seen from behind. Fibres are seen passing from the retina and occipital cortex to the right superior colliculus. The tecto-spinal fibres are seen passing through the medulla to the ventral horns of the cord. A neuron is seen passing from the right superior colliculus to the right third nerve nucleus, and one from the left superior colliculus directly into the third nerve trunk.

The Death Agony.—During the death agony there is generally marked miosis, which at the time of death suddenly gives way to dilatation. This in the course of a few hours is followed by narrowing from rigor mortis, the pupils widening again when the rigor passes off.

Mydriasis.—This results from deficient innervation of the irido-constrictor, or from excessive stimulation of the irido-dilator. It may occur pathologically in consequence of :—

Paralysis of the third nerve : paralytic mydriasis. In this case it is often unilateral. In nine cases out of ten organic mydriasis is due to syphilis from involvement of the third nerve, in the shape of cerebral lues, tabes dorsalis, or general paralysis of the insane. It is important to remember that syphilitic mydriasis may occur soon after the primary infection. Among mydriatics, atropine, duboisine, daturine, hyoscyamine act by paralysing the third nerve terminals. In extreme chloroform narcosis paralytic mydriasis also occurs.

Irritation of the sympathetic : spastic mydriasis. In Graves' Disease the pupils are apt to be large. The mydriasis here, as well as the retraction of the lids, is due to hyperactivity of the sympathetic. An irritative lesion of the sympathetic on one side may cause dilatation of the corresponding pupil. Among mydriatics cocaine acts by stimulating the sympathetic. Spastic mydriasis is met with in a variety of functional nervous diseases—*e.g.*, insanity (in which the mydriasis may alternate with miosis), epilepsy, hysterical seizures, migraine, dyspnœic attacks, uræmic convulsions, painful crises (tic doloureux, lead colic, biliary colic, tabetic pains, the pains of parturition). If in a case of convulsions the pupils are not dilated and the corneal reflex is present, epilepsy can be excluded.

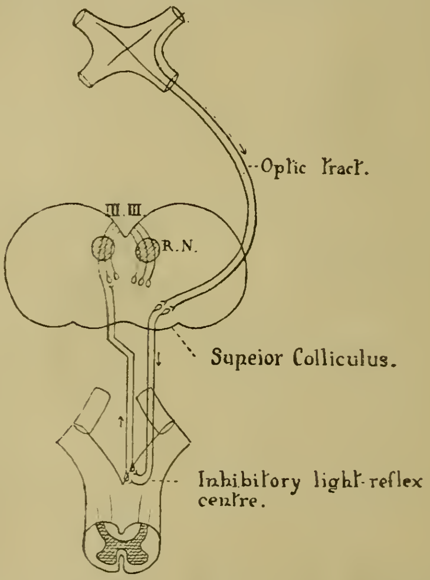

Fig. 32.—Diagram showing the long light reflex arc according to Bach. Fibres are seen descending from the right superior colliculus to the inhibitory light reflex centre near the calamus scriptorius. A further set is seen ascending from this centre. These either pass directly into the trunk of the third nerve, or terminate within the nucleus of the third nerve.

Optic Atrophy.—In marked optic atrophy, light falling upon the retina generally fails to cause reflex narrowing of the pupil, which is thus apt to be dilated. The coarser fibres, subserving the light reflex, may, however, be less involved in the absorption process than the finer visual fibres.

Glaucoma.

Asthenia.—The delicate, the anæmic, the tubercular, and the neurasthenic are apt to have large pupils.

Hippus.—This consists of a rapid rhythmic alteration in the size of the pupil occurring without any external excitation.

Inequality of the Pupils (anisokoria).—Normally the pupils seldom differ more than slightly in size. Congenital inequality sometimes occurs; it may be such that now one pupil, now the other, is the larger (*anisocorie à bascule*). Inequality may occur in the healthy in consequence of inequality in the refraction of the two eyes.

When not due to disease of the eye itself, such as iritis, or glaucoma, or to refraction error, decided inequality suggests organic disease of the nervous system; especially if the pupils are small. Inequality may result from disease of the nervous apparatus of one eye—*e.g.*, optic atrophy, paralysis of the third nerve, or of the sympathetic. It is common in tabes dorsalis, general paralysis of the insane, and cerebro-spinal lues. At some time or other it is always present in tabes. It may occur in other diseases, such as uræmia and organic disease of the brain—*e.g.*, tumour, hemorrhage, meningitis, desseminated sclerosis.

Transitory inequality may occur in acute meningitis and epilepsy.

Irregularity (*i.e., non-circularity*) *of the Pupillary Margin.*—Irregularity has been experimentally produced by stimulating individual ciliary nerves. Putting aside the irregularity resulting from adhesions, this condition is much the most frequently met with in tabes, general paralysis of the insane, and cerebro-spinal lues. It may precede the appearance of the Argyll Robertson pupil.

In the acute phase of glaucoma the pupil is oval; later irregularity may result from irregular atrophy of the iris. Irregularity from a similar cause is not infrequently met with in old people.

A portion of the pupil may be congenitally absent (coloboma).

Eccentricity of the Pupil.—This condition is often congenital and has little diagnostic significance., It has been given as a symptom of disease in the neighbourhood of the corpora quadrigemina.

b. Abnormalities in Respect of the Light Reflex.—Paradoxical light reflex is a supposed widening of the pupil in response to the stimulus of light (and, contrariwise, a narrowing of the pupil when it is shaded). It is probably a secondary dilatation following upon a primary contraction which has passed unobserved. Such a secondary dilatation is a common occurrence; nor must it be forgotten that when light is suddenly flashed into the eye the lids may be forcibly closed. This forcible closure causes a temporary narrowing of the pupil (orbicularis phenomenon), and the pupillary dilatation which follows upon this may erroneously be regarded as a paradoxical light reflex.

The pupils may be immobile, failing to react to any form of stimuli, either as a result of fixation by adhesions, or in consequence of such conditions as cerebral compression, concussion, hæmorrhage, and uræmia.

In the paralytic mydriasis from atropine the light reflex is entirely lost. It persists in a moderate degree in the spasmodic mydriasis caused by cocaine; similarly, in the spasmodic miosis produced by eserine and pilocarpine some light reflex is usually retained.

In disease of the retina or of the optic nerve (*e.g.*, optic neuritis, or optic atrophy) causing complete interruption of light stimuli, the light reflex is necessarily lost. In such cases (*e.g.*, in complete blindness from double optic atrophy) the contraction on accommodation and convergence is preserved. Usually the light reflex is retained so long as any sight remains, and it may even be present when there is complete blindness.

In unilateral optic atrophy, even though the direct light reflex is lost in the affected eye, the pupil of the latter may be made to contract consensually through the sound eye. On the other hand, the pupil of the sound eye cannot be made to contract consensually through the affected eye.

In hemianopia resulting from disease of the optic chiasma or optic tract, light falling upon the blind portions of the retina fails to evoke the light reflex (Wernickes' sign). On the other hand, hemiopic loss of light reflex is said sometimes to occur without hemianopia, when a limited lesion interrupts the light reflex fibres just after their separation from the visual fibres, close to the superior colliculus. (Fig. 30.)

In recovery from optic neuritis the light reflex may recover perfectly, while sight recovers partially only. In other cases sight is regained before the light reflex. Optic neuritis may affect the light reflex fibres more than the visual, and *vice versâ*.

When, without any disease of the retina, optic chiasma, or optic tract, the pupil fails to contract in response to light but contracts upon accommodation, the condition is known as the Argyll Robertson pupil. This phenomenon is practically pathognomonic of tabes, general paralysis of the insane, or cerebro-spinal lues. It is most common in the first of these, least common in the last.

Short of complete loss of the light reflex, the pupils may respond sluggishly to light. They may similarly respond sluggishly to accommodation and convergence. This sluggish reaction is suggestive of a syphilitic or meta-syphilitic disease of the nervous system.

The "myoclonic pupillary reaction" may be referred to here. This consists of a continuation of miosis for some time (one to two minutes) after the removal of the exciting cause (*e.g.*, light, accommodation). It occurs most frequently in syphilitic and meta-syphilitic disease.

In testing for the Argyll Robertson pupil the patient should look into the distance, so as to obviate the effect of convergence and accommodation. We must make sure that there is no disease of the retina or optic nerve; and bear in mind that the forcible closure of the lids, which may result from sudden entrance of light into the eye, may cause the pupil to contract.

The sensibility of the retina to light reflex stimuli is greatest in the region of the macula, diminishing thence outwards. A pupil which fails to contract to bright daylight after even prolonged shading, can sometimes be made to contract in the dark room by concentrating light on the macula by means of a lens.

The pathology of the Argyll Robertson pupil has not wholly been cleared up. The condition was once attributed to selective degeneration of the anterior portion of the third nerve nuclei. In the light of Marina's observations this view can no longer be held. In all the cases of Argyll Robertson pupil which this observer has examined *post mortem*, he has found degeneration of the cells of the ciliary ganglion and of the ciliary nerves, while the oculomotor nuclei have been intact.

Abnormality in respect of accommodation.—Spasm of accommodation is common, and may be so great as to cause a high degree of myopia. This condition is frequently met with in nervous children, and is occasionally seen in young adults. Though it may occur in hysteria it is doubtful whether it is a hysterical phenomenon. In these cases of ciliary spasm there is no corresponding spasm of the irido-constrictor. This shows that the nervous mechanism subserving each of these correlated phenomena may functionate independently. Eserine and pilocarpine, which produce miosis, cause also spasm of accommodation. Atropine and duboisine cause paralysis of accommodation; also paralysis of the third nerve. In states of debility accommodation is often weakened.

Loss of accommodation narrowing without loss of light reflex is rare. It occurs most frequently in diphtheria in conjunction with paralysis of the ciliary muscle. Nothing is known concerning the exact seat of the lesion in loss of this reaction.

Syphilis more frequently causes loss of accommodation than diphtheria, but in the former disease the remaining intrinsic muscles are involved at the same time.

In Botulism accommodation may be paralysed alone or in conjunction with other ocular palsies.

The power of accommodation diminishes with advancing years. It is therefore difficult to test for paralysis of accommodation in the aged.

A NOTE ON INTESTINAL STASIS. (*a*)

By R. MURRAY LESLIE, M.A., B.Sc., M.D.,
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THE subject of intestinal stasis is extremely important from the standpoint of the physician. The brilliant researches of Mr. Arbuthnot Lane have thrown new light on the whole question of functional disturbance of the gastro-intestinal tract, of which dyspepsia and constipation are merely symptomatic manifestations.

Intestinal stasis consists essentially in the arrest of normal peristalsis, or such interference as to render the peristaltic movements inefficient in preventing undue accumulation of intestinal contents. The stasis may be produced either by neuro-muscular atony or by mechanical obstruction. Neuro-muscular atony may be congenital, or it may be associated with anæmia, neurasthenia, and other debilitating conditions, or, indeed, may be the result of sedentary habits, especially when associated with matutinal neglect. The nervous factor may manifest itself by a defective reaction to natural stimuli, which may be either natural to the individual or due to a temporary lowered vitality of the nerve centres, as in neurasthenia. Dietetic errors, including the taking of semi-solid, pulpy food containing an insufficiency of solid stimulating residue, also play an important part.

The condition known as enterospasm, which in women may take the form of spasmodic constriction of a portion of the colon, is a not uncommon accompaniment of hysteria and neurasthenia, particularly when these are associated with painful pelvic affections, and if, as sometimes happens, we have atony of one part of the large bowel, with enterospasm of the portion immediately beyond, there is present a combination which specially favours the occurrence of intestinal stasis.

As regards mechanical obstruction, it is only within the last few years that we have begun to realise the important *rôle* played by mechanical obstruction and its far-reaching effects. In common with many others, I was at first extremely sceptical as to the presence and significance of the various adhesions and kinks described by Mr. Lane; but six years ago I became a convert as the result of my observation of a particular case of chronic intestinal stasis of 13 years' standing. All medical and hygienic remedies having proved unavailing, I consulted Mr. Lane, as the patient appeared to be sinking from emaciation and asthenia. At the short-circuiting operation several thick, adhesive bands were clearly demonstrated, which were certainly abnormal. The patient, who had been a miserable, chronic invalid for many years, now enjoys perfect health, and has been able to play seven sets of tennis without undue fatigue. She gained two stones in weight after the operation. My later experience of a considerable number of similar operation demonstrations, in most cases preceded by radiographic examinations, has only tended to strengthen my belief in the importance of these adhesive structures and kinks, and I feel I can with confidence predict that a similar view will sooner or later be universally accepted by the medical profession.

In my own experience, the two facts that stand out prominently are the enormous preponderance of cases occurring in the female sex, and the frequent association with enteroptosis. Out of some fourteen successive cases of well-marked intestinal stasis that have recently been under my care, all have been women, and with the exception of three, all exhibited X-ray evidence of enteroptosis to a greater or less degree. The average age of these patients was 35, the ages varying from 29 to 44. I had one case (not in this series) of an old lady of 72 years of age. In the above series of cases, the average period between the onset of symptoms and the date of coming under observation has been twelve years. There has generally been a history of constipation, commencing in early adult life (18 to 24) the more remote symptoms of auto-intoxication, including emaciation and asthenia, becoming pronounced between the ages of 30 and 45. Another curious fact in the series is that with three exceptions all the patients were unmarried, which confirms Mr. Lane's views in regard to the beneficial effects of matrimony as a counteracting influence.

The explanation of this sex preponderance I believe to be due to the fact that enteroptosis is probably by far the most important primary causal factor in the production of intestinal stasis. Meinert found visceroptosis in 80 per cent. of his gynæcological patients, visceroptosis being fully ten times more common in the female than in the male. This greater frequency may be attributed to the following causes:—(1) the less marked obliquity of the female pelvis (so that the pelvic cavity, in addition to having greater width and capacity, is more of a continuation of the elongated female abdominal cavity, while the more expanded pubic arch gives less direct support to the overlying viscera); (2) the more lax condition of the abdominal walls in women (which offer less resistance to downward pressure and which may be accentuated by over distension due to repeated pregnancies and other causes); (3) the wearing by women of wrongly constructed corsets (which Einhorn believed to be an important causal factor, particularly when the corset exerts pressure on the base of the thorax and upper part of the abdomen, thus forcing the organs downwards); (4) the almost universal adoption in civilised countries of the sitting posture in the act of defæcation, in contrast to the natural crouching one, the present high lavatory seats being specially harmful in the case of women and children; and (5) the greater tendency to neurasthenic debility and constitutional weakness of the mesenteric and other peritoneal attachments.

As regards the symptomatology of intestinal stasis, my series of cases tends to confirm the truth of Mr. Lane's observations in regard to auto-intoxication, though I am inclined to join issue with him in regarding the frequently associated neurasthenia as necessarily in all cases a sequela of intestinal stasis. I believe that, in not a few instances, neurasthenic debility is in reality a precursor of the stasis and a not unimportant causal factor—possibly hereditary. It would be impossible to enumerate all the symptoms manifested by these patients; the most important have been general languor and inertia, irritability, mental depression, cold, clammy and livid extremities, dark staining of the skin, muscular debility, incapacity for prolonged physical or mental exertion, and progressive emaciation. A nodular condition of the breasts was often present in the advanced cases. Spasmodic dragging or abdominal pain and tenderness were present in varying degrees in most advanced cases,

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(*a*) Substance of remarks at a discussion held on December 9th, 1912, at the Medical Society of London.

and in practically all of these we found evidence of definite obstruction, due to ileal kinks, duodeno-jejunal kinks, angulation of the flexures, or fixation and impaction of the cæcum or sigmoid in the pelvis. It may be taken as an axiom that whenever there is pain there is obstruction somewhere. In several cases the radiographic evidence was confirmed at the subsequent operation. It is noteworthy that in some cases of enteroptosis and intestinal stasis there were remarkably few symptoms, while other patients, in some of whom the condition seemed less advanced, were in a miserable condition of ill-health. In the former a condition of tolerance seems to have been established.

I may take this opportunity of emphasising the great importance of radiography in diagnosing the presence of visceroptosis, the presence of kinks or impactions, the site of the obstruction, and the full extent of the stasis. In the visceroptosis cases there are generally the two cardinal features: (1) Discomfort and inertia get worse as the day goes on; (2) are relieved by lying down.

As regards remote sequelæ, I have had instances of cystic change in the left ovary, which had become involved in the sigmoid adhesions, appendicular irritation, mucous colitis, gall stones, and gastric dilatation, but have had no experience of actual gastric or duodenal ulceration of stomach or duodenum, carcinoma, or tuberculosis following intestinal stasis.

With reference to treatment, I can speak strongly of the value of liquid petroleum in association with abdominal massage, exercises and electricity, while in the visceroptosis cases much benefit results from the use of properly constructed corsets and abdominal supports.

As regards operative measures, resection of the bowel, or even short-circuiting, seems heroic treatment, even for obstinate constipation. I have, however, had experience now of several cases in which simple measures had been tried, without avail, to relieve the constipation and abdominal pain and to check the progressive ill-health, and in which I felt it my duty to advise operation. The dividing of the ileum and the short-circuting of its termination into the pelvic colon or upper part of the rectum has proved more than satisfactory, and the patients are all now enjoying good health. In Mr. Lane's hands the operation appears to be attended by but little risk.

If the results are so good, it is surely better in advanced cases, where simple remedies have failed, to have recourse to this radical cure for intestinal stasis, rather than leave the patient in a miserable state of suffering and chronic invalidism, rendering life almost insupportable, and so lowering the resistive power of the tissues, owing to the effects of auto-intoxication, as to frequently endanger the life of the individual from intercurrent complications or otherwise.

SOME CASES ILLUSTRATING THE DIFFICULTY AND IMPORTANCE OF EARLY DIAGNOSIS IN ACUTE INTESTINAL OBSTRUCTION.

By ERNEST W. HEY GROVES, M.S., F.R.C.S.,
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In forming a complete clinical picture of a typical case of intestinal obstruction, it is necessary to assemble all the signs and symptoms of this condition as forming parts of a whole; but it is of the utmost importance to remember that in the majority of cases diagnosis must be made and action must be taken, long before the picture is complete. We must be prepared to act upon a reasonable probability, and not wait for convincing demonstration in many surgical conditions, notably in acute abdominal disease and in the case of malignant growths. The following cases are all those of acute obstruction of the bowels (*a*) which came under the writer's care within fifteen months, exclusive of those of strangulated hernias; and they illustrate in a striking manner two important points, viz. first, on what slender ground a diagnosis must often be founded, or rather how the exact diagnosis must often be deferred until after opening the abdomen, and second, what extreme changes occur in the intestine in a very short time.

Case 1.—Enteric intussusception (Fig. 1). S.H., æt. 24, working man. Admitted to the Cossham Hospital June, 1910, for abdominal pain.

History.—No previous illness. Twenty hours before operation he felt a sudden pain in the abdomen just as he was rising from bed; this was followed by slight vomiting. The pain continued without much change, but the vomiting did not persist.

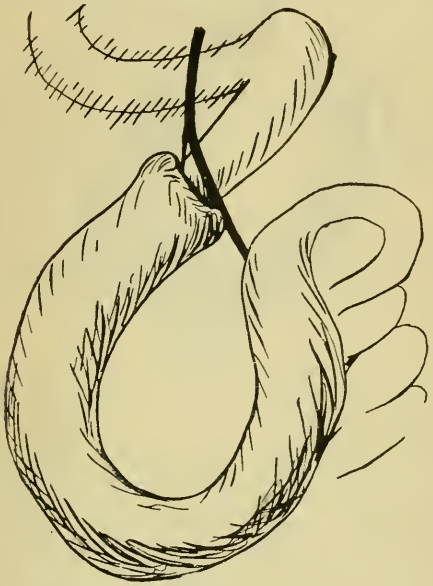

Fig. 1.

Condition.—Uniform distension of the abdomen, with some diffuse tenderness. Pulse 110, temperature normal. Bowels not open since the pain began.

Operation was decided upon at once because of the distension associated with persistent pain and constipation. Median incision, quantity of blood-stained exudate. A large coil of black gut, each limb being about one foot long and two inches in diameter, was easily brought to the surface. It consisted of an intussusception of the upper part of the jejunum, and the highest part of the superior mesenteric vessels was dragged into its neck. It was necessary to reduce the invagination in order to clear the neck from these important vessels. This was a matter of some difficulty, and in doing it the ensheathing layer was torn in several places. A piece of gut measuring four feet nine inches in length was resected, this being about two inches more than the gangrenous portion. The cut ends of the gut were closed by purse-string sutures, and a lateral anastomosis formed.

The patient made a rapid and uneventful recovery. A peculiar fact was discovered in subsequent examination of the resected gut, viz. that a polypus about the size of a small walnut was growing from the mucous membrane in the neck of the entering layer. This was proved to be a simple adenoma. The existence of a polypus at the apex of an intussusception is, of course, well known to be a common cause of the condition; but it is almost unique to find such a growth at the neck, and its relation to the invagination is difficult to surmise.

(*a*) *Bristol Medico-Chirurgical Journal*, March, 1912.

CASE 2.—Strangulation under a band (Fig. 2). John S., æt. 55, labourer. Admitted to the General Hospital June, 1910, for abdominal pain.

History.—No previous illness. Sudden pain in the abdomen twenty-eight hours before the operation. He was in the hospital for twelve hours before the gravity of his condition was realised. During this time he had a little vomiting, but the bowels were opened after an enema. The temperature was normal, but the pulse rose to 120, and the abdomen became slightly distended.

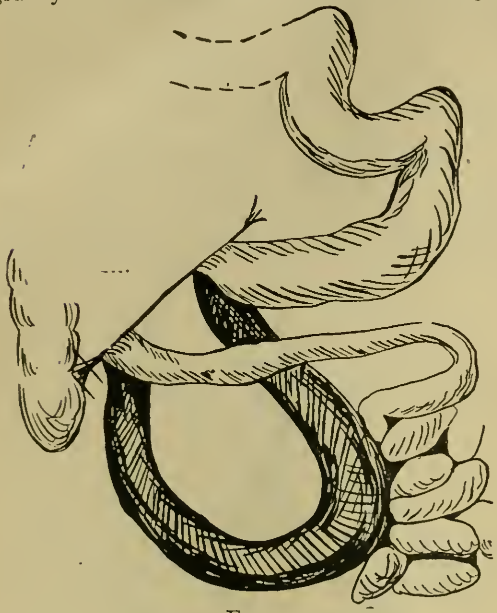

FIG. 2.

Operation was decided upon because of the steadily rising pulse rate and the abdominal pain and distension. Median incision. A quantity of foul-smelling, blood-stained fluid escaped, and a large distended coil of black gut was found strangulated under a long thin band, stretching from the right iliac fossa up to the right side of the mesentery. This band was as tight and as thin as a fiddle-string. The vessels in the imprisoned piece of intestine, which was a high part of the jejunum, were thrombosed, and the foul smell of the exudate proved that rapid transudation was taking place through its devitalised wall. The gangrenous gut, measuring a little over two feet in length, was resected by the cautery. A lateral anastomosis was done after closing the open ends of the bowel. The wound was drained. The patient made a rapid recovery, and has since been quite well.

CASE 3.—Tuberculous peritonitis (Fig. 3) Mervyn T., æt. 13, admitted to the General Hospital, August, 1911, for severe abdominal pain.

History.—He had been healthy until one year previously, since which time he had had several severe attacks of abdominal pain. On two occasions he had been admitted to the Hospital on this account, once under a physician and once under a surgeon, but both times he had been discharged because nothing definite could be detected which required active treatment. On the present occasion the pain has been unusually severe, but he has taken his food well and the bowels have acted regularly.

Condition (August 23rd, 1911).—A rather thin boy, in whom no objective evidence of disease could be discovered. The abdomen moves well, it is not tender, but rather full. The pain which occurs in paroxysms is very severe, and at night he keeps the other patients awake by his screams.

Operation was in this case determined on simply on account of the severe pain. Median paraumbilical incision. Some clear free fluid. Extensive tuberculous peritonitis, with many caseous glands in the mesentery. A tight band about half an inch wide, connected at one end to the right side of the mesentery and at the other to the lumbar parietes on the left side constricted the jejunum about twelve inches from the duodenum. This was divided. The gut beneath the line of constriction was so thin and ecchymosed that it had to be sewn over. The boy made a good recovery.

In this case the absence of vomiting and constipation is especially noteworthy.

CASE 4.—Strangulation by a Meckel's diverticulum. Lily W., æt. 11. Admitted to the Cossham Hospital April, 1911, because of abdominal pain and vomiting.

History.—Had had chorea for some months. On April 26th she had sudden abdominal pain, but was not ill enough for the doctor to be sent for. Bowels acted with a normal motion. April 27th she was no better, the pain being more constant, and localised on the right side. Dr. Skelton saw her, and thought she had appendicitis. Admitted April 28th.

Condition.—Appeared to be very ill. Pulse 120, respiration 40, temperature 99deg. Abdomen distended and tender, more so over the right iliac fossa, which region was also somewhat dull to percussion. Bowels acted slightly after a turpentine enema. Diagnosis of acute appendicitis.

Operation.—Appendix incision. Free blood-stained fluid. Some coils of distended black gut appeared, and it was necessary to make a median sub-umbilical incision. The lower end of the ileum was tightly strangulated by a cord, the thickness of a sash-cord, wound round the base of the affected loop. This being quite gangrenous was resected, forty inches in all being removed. The gut was reunited by an end-to-end union. The appendix was brought out through the wound, cut short, and used for continuous saline infusion. Her condition improved for about six hours after the operation. She then vomited a large quantity of blood-stained fluid, and died suddenly. There was no autopsy.

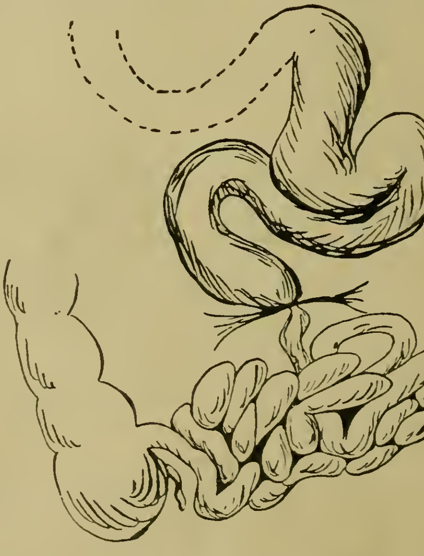

FIG. 3.

If the likelihood of acute intestinal obstruction had been suspected in this case, an early operation would have been performed, and the life might have been saved.

CASE 5.—Strangulation by appendix and Meckel's diverticulum (Fig. 4). Raymond B., æt. 6. Admitted to General Hospital September, 1911.

History.—No previous illness. On September 9th he woke up at 4 a.m. with sudden abdominal pain, which was followed by vomiting. This continued all day. The bowels were not open. On September 10th the vomiting had ceased, but the pain continued.

Condition.—Looked ill. Temperature 100deg., pulse 120deg. Abdomen a little distended, some signs of free fluid, an indistinct mass felt in the right iliac fossa. Diagnosis was made of acute appendicitis, and immediate operation performed.

Operation (September 10th, 1911).—Appendix incision. Gangrenous gut presented. Mid-line incision. A short loop of ileum was tightly surrounded at its base by a cord consisting of an appendix which was sloughing, and a Meckel's diverticulum adherent to one another. The gangrenous gut (about six inches), together with the appendix and the diverticulum, was resected, and an end-to-end junction made. A venous infusion of saline solution with pituitary extract was made at the end of the operation. Later in the evening a continuous subcutaneous saline infusion was carried out. He survived only about eighteen hours, dying in the afternoon of September 11th.

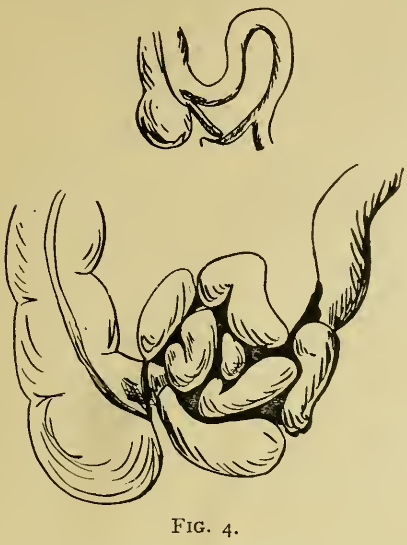

Fig. 4.

The upper diagram in this figure shows the manner in which the appendix and the diverticulum first become adherent to one another so as to form a band which subsequently ensnares a loop of intestine.

Case 6 (Fig. 5).—Strangulation by the pedicle of a fibroid. Martha C., æt. 71. Admitted to the General Hospital on September 10th, 1911, for abdominal pain.

History.—She had been told by Dr. Aust Lawrence twenty years ago that she had a "tumour of the womb," otherwise she has always had good health. Early in the morning of September 10th she was taken with severe abdominal pain, with a little sickness. The bowels had since been slightly opened.

Condition (eighteen hours after onset).—She had a drawn and anxious expression. Pulse 120deg. Temperature 97.4deg. The abdomen was soft and not distended. There was slight general tenderness. An enlarged nodular uterus filled up the pelvis. Immediate operation.

Operation.—Sub-umbilical incision. A large quantity of almost pure blood escaped from the incision. A loop of ileum was strangulated in the pelvis by the thin pedicle of a sub-peritoneal fibroid, turned back into Douglas's pouch. This fibroid pedicle was so slender that it broke on manipulation, but it had served to cause gangrene in the coil of incarcerated gut. This, amounting to about three feet, was resected, and a side-to-side anastomosis performed. The patient died in spite of a venous saline infusion performed on the table.

My special object in presenting this short series of consecutive cases is to illustrate and emphasise the difficulty and importance of making an early diagnosis in conditions of intestinal obstruction.

It will have been observed that the history in all of these was comparatively short (between eighteen hours and three days). Now it may be true that a case of intestinal obstruction will live for a whole week in the absence of any operative relief, but in the majority of cases the fate of the affected gut is determined, and immediate operation demanded within twenty-four to forty-eight hours.

It is utterly unjustifiable to wait in any case of suspected intestinal obstruction beyond this time. A longer period may be necessary for the development of the full clinical picture, with the sunken features, fæcal vomiting and abdominal distension, but if one is to wait for this before acting, one might as well wait a little longer for the *post-mortem* examination.

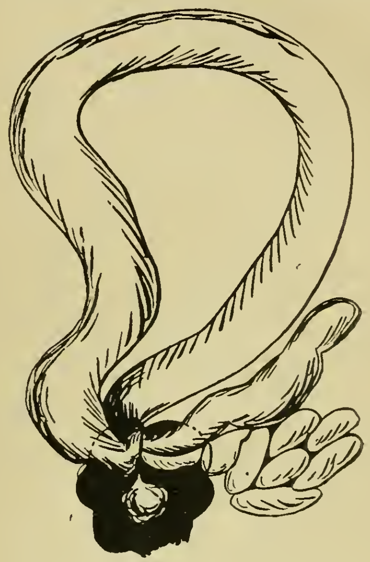

Fig. 5.

The vomiting in the early stages is only slight and transient, as is seen in all the above cases. It is caused by the sudden peritoneal stimulation in the same way as the early vomiting of appendicitis. The fæculent vomiting, which perhaps is the only unmistakable sign of obstruction, is a comparatively late phenomenon, caused by the reflux of fluid from the contracting bowel. It is always desirable to operate before the advent of this evidence of the advanced progress of the malady.

It seems to me that persistent abdominal pain of a severe type, unrelieved by rest and starvation, must remain the most notable sign, and often the only one, upon which a diagnosis is to be founded. When I say diagnosis, it should be noted that in most cases it is only possible to go so far as to say that some grave catastrophe has occurred which demands further investigation. The case may turn out to be one of appendicitis, intestinal obstruction or pancreatitis, but it is better to "look and find out" than to "wait and see."

With certain precautions, the general rule that persistent abdominal pain, unrelieved by rest and starvation, requires the abdomen to be opened, will often be the means of saving life, though very rarely it may lead to an unnecessary operation. By persistent abdominal pain, in relation to the acute conditions we are considering, is meant pain with an abrupt onset in a patient who has been in good health, which persists for more than twenty-four hours, although the patient has been kept in bed on the lightest possible diet.

Such conditions as lead colic, tabes dorsalis, tuberculous spine and aneurysm must be borne in mind, and each can usually be excluded by the absence of characteristic signs.

The only condition likely to be mistaken for intestinal obstruction, in which operation will lead to disaster, is the acid intoxication of children. In this there is persistent vomiting, but there is a marked absence of pain, a tendency to drowsiness, and a sweet smell in the breath which should serve as warnings, which will be confirmed if the acetone bodies are found in the urine.

OPERATING THEATRES.

HAMPSTEAD AND NORTH-WEST LONDON HOSPITAL.

Long Oblique Fracture of the Femur.—Mr. Jackson Clarke operated on a tall, broadly constructed and very stout woman, who said her weight was 17 stone. She had fallen on getting out of a motor omnibus on her right knee. She had been unable to rise, and was brought to the hospital on an ambulance. On admission the right thigh was seen to be greatly swollen, especially in its lower three-fourths; the knee joint appeared to be normal and on palpation marked tenderness was found extending from a point on the outer surface of the femur at the meeting of the uppermost and second fourths of the bone to another point immediately above the inner condyle. A very oblique fracture was diagnosed, and it was decided that immediate operation was advisable.

Open ether was administered by Dr. G. A. Barton, and an incision made on the antero-external aspect of the limb from a little below the great trochanter to slightly above the knee. At each extremity the incision was prolonged inwards for three or four inches; the integuments being raised and drawn inwards, the rectus was separated from the vastus externus and also drawn inwards, exposing the front of the crureus muscle, which was incised down to the fracture, giving vent to several ounces of liquid blood. The length of the cleavage was now seen to be about twelve inches, the lower end of the upper fragment being just below the adductor tubercle, and the upper end of the lower fragment ended in a sharp point on the outer aspect being displaced about an inch upwards. There was a lateral separation of about three-quarters of an inch between the two fragments, the space between them being filled with recent blood-clot, which was removed without interfering with the bone marrow, to which it was adherent. The shape of the fragments was such that no form of plating was applicable to them, and it was decided that wiring would answer every indication if properly applied. The sharp point on the lower fragment was cut off to prevent its tearing either the tissues or the gloves of the operator, then two holes were drilled near the upper extremity of the lower fragment about three-quarters of an inch from each other; next two drill holes were made at points in the upper fragment corresponding anatomically to those made in the lower fragment, near the lower end of the lower fragment, and at corresponding points in the upper fragment drill holes were made. Now a piece of stout, well-annealed silver wire was passed first through the uppermost drill holes from the outer to the inner, then brought back from the second inner to the second outer; another wire was passed in the same way through the corresponding pairs of holes at the lower ends of the fragments. Downward traction was now made on the limb and the two wires were twisted progressively as the fragments came into position; this they did perfectly. As an extra precaution, a third wire was made to encircle the now reunited bone and twisted taut. Redundant wire was then cut away, and the twisted portions beaten flat against the bone. The muscles and fasciæ were reunited with a few stout catgut sutures and the skin incision was closed with sutures of silkworm gut. Dressings were then applied; a single Thomas's hip splint was put on and three malleable metal splints applied to the anterior internal and external aspects of the limb respectively, and held in position by a few turns of bandage.

The post-operative course was uneventful, the splints and dressings were removed at the end of the third week and the stitches taken out, the wound having healed by first intention, the limb having its normal shape and length.

Transverse Fracture of Both Bones of the Leg.—The same surgeon operated on a muscular young man who had been injured when playing football. On admission the fracture was about the middle of the leg and the upper end of the lower fragment projected forwards under the skin. The limb was put up on a wooden back splint with side splints, and a skiagram taken through the splints showed that much of the displacement persisted. An open operation was decided upon, and after the usual preparation an incision was made first over the fracture in the fibula. The muscles and periosteum were much torn about the site of this fracture. A four-hole Lane's plate was applied by means of the usual instruments. The fracture in the tibia was next exposed, a curved incision being made; its ends were over the crest of the tibia, the rest of it lying over the anterior muscles. A flap was then turned upwards and inwards, the fractured surfaces being exposed; the periosteum was found to be torn, and there was a collection of about two ounces of clotted blood under the skin. The fracture was transverse, but there were numerous fissures extending a short way from the broken surfaces in both fragments. The plate and screw Mr. Clarke here used were those recently designed and introduced by the American surgeon Sherrard; the plates are made of vanadium steel, which allows of their being bent to any desired degree. The screws have a groove cut on each side near their ends, so that they act to some extent as drills as well as screws. Sherrard's combined screw-driver and screw-holder is, Mr. Clarke pointed out, a most ingenious and effective instrument, and the time required for fixing the bone-plates is greatly diminished by using it and the special screws. The plate was applied to the outer surface of the tibia, so it was covered by a thick layer of muscle when the wounds were closed in the usual way.

Mr. Clarke said the first case was an example of a fracture requiring operative treatment, and the fragments being of such a form that they could not be fixed by plates, but were perfectly fixed by the older method of wiring. In the second case, the fractures being purely transverse, were perfectly suited to fixation by plating.

TRANSACTIONS OF SOCIETIES.

HARVEIAN SOCIETY OF LONDON.

Meeting held at the Stafford Rooms, Thursday, December 12th, 1912.

The President, Dr. H. J. MacEvoy, in the Chair.

Mr. Charles W. M. Hope read a paper on

SUPPURATION IN THE NASAL SINUSES.

After describing their anatomy and development, and the ætiology of sinus infection, he discussed the various nose, eye, ear, cranial and general symptoms. Many cases, he said, first came under notice on account of troubles otherwise than nasal, and instanced the case of a patient who came to him on account of deafness in the right ear, due to middle ear catarrh, the cause of which was a foul maxillary empyema on the same side.

After describing the various methods of examination carried out to reach a definite diagnosis, he briefly described the treatment, operative and palliative, necessary for each individual sinus. The paper was well illustrated by means of bony and recent specimens, and some X-ray protographs.

The paper was discussed by Dr. Scanes Spicer and Dr. Matthews, and Mr. Hope replied.

Dr. Spilsbury then read a paper on

INJURY AS A PREDISPOSING CAUSE OF NEW GROWTHS.

He pointed out that tumours of the more superficial parts of the body were the ones in which a history of injury was most frequently obtained. Taking the bony skeleton he showed the tumours occurred with greater frequency in those bones which were more frequently injured and in those parts of the bones which were more superficial.

In the case of brain tumours, the tubercular as well as the neoplastic, not only was there a frequent association with injury, but in some cases a remarkable relationship of the tumour to the injured area either immediately beneath it or in the centre-coup position. Again, in melanotic growths of the skin, injury or chronic irritation by clothes or otherwise appeared frequently to be a cause of tumour development. In testicular or mammary tumours injury was probably a less frequent predisposing cause.

The paper was discussed by Dr. Scanes Spicer, Mr. Hope, and the President, and Dr. Spilsbury replied.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Meeting held at the West London Hospital, December 6th, 1912.

Before proceeding to the business of the evening, Mr. **Bishop Harman** presented three patients for examination.

Cases 1 and 2 both showed senile central choroiditis with deposits of cholesterine crystals in the degenerate tissue. The maculæ were practically destroyed, gave a "worm-eaten" appearance, and glistened like jewelled patches. Angio-sclerosis and some lenticular changes were apparent. Vision was bad. (3) A boy with unusually well-marked opaque nerve fibres in the left eye. A plume-shaped radiate white patch, springing from the lower edge of the disc, passed below the macula, and vessels were seen embedded in its fibres. The condition had no pathological significance, and was distinguished from a pathological exudate by the complete absence of any signs of inflammation, such as haze or puffiness of the retina.

The President, Dr. G. P. **Shuter**, then took the chair, and said he had much pleasure in announcing that Sir Berkeley Moynihan had consented to deliver the next Cavendish Lecture; also that the annual dinner of the Society was arranged for February 6th. He then invited Mr. W. Sampson Handley to read his paper on

PELVIC APPENDICITIS AND ITS TREATMENT.

Mr. **Sampson Handley** commenced by stating that the paper was based upon his experience of the disease, and dealt with those peculiarities which characterise appendicitis when the appendix occupied a pelvic position: the pelvic signs and symptoms which might arise in connection with a normally placed appendix were not considered. Early operation was specially important in pelvic appendicitis because in the earliest clinical stage of the disease the appendix might be gangrenous or distended to the point of rupture, and because in the pelvis the formation of a small localised abscess round the appendix was the exception. More usually an unlocalised peritonitis resulted, which was very apt to produce inflammatory paralysis of the pelvic intestines. The pelvic ileum was intensely congested, œdematous, sharply kinked, and immobile, while the ileum above the pelvis was distended but not inflamed. The obstruction was moreover a duplex one, for he was able to show from his cases that the pelvic sigmoid also was the seat of obstruction, a fact of great importance in treatment. Clinically the disease might be divided into three stages—(1) the stage of hypogastric colic, or ambulatory stage, (2) that of intestinal obstruction, (3) that of peritonitis. Frequently cases were first seen by a medical man in the second stage, for the subjective signs were less marked if the appendix lay in the pelvis. The clinical signs were next dealt with in detail. Pain on micturition and the absence of rigidity and swelling in the right iliac fossa were especially referred to. A retro-cæcal appendicitis, with trickling of pus into the pelvis, might closely simulate a pelvic appendicitis. Moreover, a pelvic abscess was a common result of inflammation of a normally placed appendix. In such cases intestinal obstruction rarely resulted, and the prognosis was much better than in true pelvic appendicitis. Other points in diagnosis were dealt with. In regard to the treatment of seven cases operated upon during the first forty-eight hours after onset, all recovered. Ileo-cæcostomy was necessary in only two of these cases. Of eight late cases, some of whom were first seen in a hopeless condition, five died. It was essential to decide definitely whether inflammatory obstruction was or was not present. In the presence of obstruction an ileo-cæcostomy was necessary. Remembering that the pelvic sigmoid was also paralysed, it was necessary to provide a temporary safety-valve for the large intestine by tying a catheter into the cæcum. Ileo-cæcostomy combined with cæcostomy was the method of choice for obstruction of pelvic inflammatory origin.

The **President**, after thanking Mr. Sampson Handley for his interesting and instructive paper, said he would like to hear the views of members on the relationship between pelvic appendicitis and disturbed menstruation, a subject only briefly referred to in the paper. He had seen many remarkable cases in which one might have expected to find some relationship, but in vain. On the other hand, he had observed cases in which there was great derangement, often with severe pain, although the inflamed appendix was far removed from the organs concerned. Another point he wished to hear discussed was the best method of drainage in pelvic appendicitis associated with abscess. The late Mr. Bidwell opened and drained such abscesses successfully, in a very large number of cases, through the rectum without making any abdominal incision. The great advantages of this method were: (1) no wound in the belly wall, (2) pus evacuated by its natural route, (3) avoidance of shock from a prolonged operation, (4) no disturbance of inflamed or adherent intestine.

Mr. **Aslett Baldwin** laid stress on the insidious formation of appendix abscess in the pelvis. He considered drainage through the rectum or vagina the best method of dealing with a soft lump felt in either situation, but if the abscess burrowed into the abdomen incision above would be required as well. After about two months the appendix could be removed through an abdominal incision, and in this way hernia through the belly wall was best avoided. In his experience short-circuiting or opening the intestine had not been required in anything like so large a proportion of cases as in the series described by Mr. Handley, and he thought this had been avoided by the sitting position, eserine salicylate and pituitary extract hypodermically, and calomel by the mouth. Not long ago he had a severe case in which the small intestine relieved itself through the upper part of the abdominal incision, and he had to operate twice to close the hole in the bowel.

Mr. **Rickard Lloyd** related a case in which the sudden onset of the symptoms at first suggested a perforation of the stomach, but next day symptoms of an acute affection of the right ovary or appendix developed. At operation the appendix was found adherent to the right ovary, and both presented evidences of long standing inflammation and were suppurating. The appendix, ovary, and a calcareous lumbar gland were removed, drainage was secured, and the patient recovered. In another case a child, æt. 12, was affected with colic, and on rectal examination, with a view to excluding impaction of fæces as a cause of the colic, a prolapsed appendix was felt. Within two days an exploratory laparotomy revealed a gangrenous appendix with a little turbid fluid in Douglas's pouch. The day following the operation the girl seemed convalescent, but on the third day showed signs of jaundice, became maniacal, and died on the fourth day.

Dr. J. A. **Mansell Moullin** agreed that the diagnosis between appendicitis and diseases of the uterine appendages was often a matter of difficulty, especially in chronic cases; but he did not think that the relationships referred to by the President were of much value from a diagnostic point of view, as menstrual irregularities were due to so many causes.

Mr. F. G. **Lloyd** drew attention to statistics proving that 70 per cent. of cases of appendicitis recovered without surgical interference. Nature was wonderfully protective and conservative in many instances if the patient was kept at rest, and he advocated operation in the quiescent period when possible. On the other hand it was important not to delay operation when the physical signs and condition of the patient appeared to justify intervention. He also referred to a paper he had read before the Society in which he dealt with drainage per rectum and vagina, and the use of an exploring syringe in certain cases.

Mr. O. L. Addison did not consider pelvic appendicitis more dangerous, or indeed as dangerous, as appendicitis elsewhere. Out of twenty such cases in which he had operated, about half of them being children, all recovered. He did not think obstruction so common as Mr. Handley's paper suggested, as not one of his cases was obstructed. He invariably found some history or evidence of disordered micturition, usually taking the form of retention or acute pain referred to the end of the penis.

Mr. W. McAdam Eccles considered that the appendix lay over the brim of the pelvis more commonly than was usually supposed, and more frequently so in the female than in the male. Pain felt before micturition implied a full bladder pressing, directly or indirectly, upon an inflamed appendix; while pain succeeding micturition implied an emptying bladder dragging upon an inflamed appendix. In a few cases he had seen retention, but only in males. Enuresis in children was sometimes due to an inflamed pelvic appendix. These symptoms were of much more value in chronic inflammations of the appendix. Mr. Handley's description of the condition of the ileum and lower part of the sigmoid in pelvic peritonitis was most instructive and his method of drainage most ingenious. With regard to a pelvic abscess slowly developing in connection with a chronically inflamed appendix he recalled a case in point: the abscess was opened above the symphysis as well as through the rectum, and the abscess cavity quickly closed.

Dr. A. J. Rice-Oxley mentioned an acute case in which signs of vesical irritability led him to a correct diagnosis in an otherwise doubtful case. He was also able to support the statement that a very vague train of symptoms often ushered in an attack of appendicitis, which but for operation must have proved fatal. Early operation in most cases of anything like a suspicious character was the best way to deal with the attack.

Mr. Sampson Handley, in replying to various points raised in the discussion on his paper, said that he thought some of the speakers had not drawn any distinction between true pelvic appendicitis—the subject of his paper—and cases where pus tracted into the pelvis from a normally placed appendix. The latter was a much less dangerous class of case, because it rarely led to obstruction.

THE NEW LONDON DERMATOLOGICAL SOCIETY.

Meeting held December 12th, 1912.

The President, Dr. P. S. Abraham, in the Chair.

Dr. H. Samuel showed (1) a man from the clinic of University College Hospital, with lichen simplex chronicus (Vidal), affecting the lower parts of both legs. The condition had existed for about nine years, and there was considerable irritation. The left leg had been treated with salicylic plaster, and the right by means of the Kromayer mercury-vapour quartz lamp, and this one showed the greater improvement.

Dr. Eddowes regarded these cases with much interest. He recalled a case treated with mercurial plaster, and mentioned that a gelatin dressing was one of the best applications for the mechanical prevention of injury from scratching. Internal treatment was also generally necessary.

(2) A little girl, æt. 7, with favus at the back of the neck, which was said to have followed a dog-bite. At first the lesions resembled those of tinea circinata, but the characteristic yellow scutula appeared and the fungus was identified. The scalp was free, but one lesion was present upon the right fore-arm. The child was of English nationality, but the mother stated that some foreign lodgers had been staying in the house.

Dr. Norman Meachen showed a young man, æt. 19, with a papillomatous growth upon the sole of the left foot, which had been present for fourteen years. There was occasionally a slight discharge. In addition, there was a smaller, infiltrated lesion upon the inner side of the foot resembling a warty form of lupus. The father died of cancer, but there was no history of consumption in the family.

Dr. Eddowes thought it was suspiciously like the verrucose form of cutaneous tuberculosis.

Dr. T. P. Beddoes remarked upon the tendency of this class of case to give up treatment too soon.

The President said that he would scrape the growth freely and apply fuming nitric acid. These cases required very vigorous treatment.

Dr. David Walsh showed a young man, æt. 23, from Dr. Meachen's clinic at Blackfriars, with

ERYTHEMA PERNIO ASSOCIATED WITH ARTERIO-SCLEROSIS.

He had suffered from chilblains all his life upon the feet, and since the age of fourteen upon his hands. There were no signs of heart disease, but he had large thick arteries, the brachial at the elbow being especially thickened and cord-like. He had nystagmus, which was a family trait. The urine was of 1035 sp. gr., but there was neither sugar nor albumin. He was a moderate smoker. The traumatic factor here was cold.

Dr. Walsh also showed a coloured drawing of the front of the knee of a woman, æt. 45, which presented a psoriatic patch. In this case passive congestion had been produced from the pressure of a tight garter, so that the condition was analogous to that caused by heart disease. With the removal of the garter the lesion rapidly got well.

Another drawing was shown of a patch of chronic dermatitis upon the leg, following traumatism associated with mitral disease.

Dr. Vinrace showed the patient with hypertrophic dermatitis upon the leg that he had exhibited at a meeting of the Society four months ago, in order to demonstrate the improvement that had followed simple shaving of the patch. The Wassermann test had been found positive. The localised keratosis had benefited greatly by the mechanical treatment in addition to internal medication.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.

Meeting held December 13th, 1912.

Dr. Edington in the Chair.

Dr. T. K. Monro reported on the last phase of the illness of a patient shown to the Society on May 3rd as subject of

SPLENOMEGALY, POLYCYTHÆMIA, INCREASED ARTERIAL TENSION, ARTERIO-SCLEROSIS, CARDIAC HYPERTROPHY, ALBUMINURIA AND GANGRENE.

Dr. J. H. Teacher described the changes found at the autopsy, which were briefly: The heart was found to be considerably hypertrophied and the valves practically healthy. The lungs showed venous congestion, such as might be found in a mitral condition. The aorta was thickened and a number of patches of atheroma were present, but the importance of these was not noticed at that time. The abdomen seemed to be prominent. The spleen appeared to be large, but was not actually much increased in size, but hanging from it were great masses of adhesions, and the condition of the adhesions showed this to be an enormous increase in the blood vessels, and is really omental tissue wrapped round the spleen. On section the vessels are found not only to be veins but also arteries. This great mass of vessels in the omentum was connected with the diaphragm and the abdominal walls. In passing the finger between the liver and stomach, it was quite easy to make out the Foramen of Winslow, but you also felt a peculiar solid mass, which was thicker than the ridge of normal portal vessels, and a mass of tissue, forming a diamond-shaped area, with its apex at the Spigelian lobe, and practically a solid column in the centre of it with peculiar radiating matter round it, the rest of the diamond-shaped mass being cavernous tissue which was full of blood when fresh.

Further investigation confirmed the impression that it was a mass of venous channels, with the hepatic artery quite clearly recognisable, and the stellate body at one end of the mass is one part of the portal vein which is thrombosed. The superior mesenteric vessels are represented by a bunch of veins, and the splenic vein it is rather difficult to say anything about, but it lies with the artery and seems quite solid, and it could not be traced properly to the spleen.

On section of the spleen there is a large infarction occupying the middle part of the organ and forming half of its whole bulk, and which gives the spleen its weight, probably under one pound but not actually weighed, and which is rather more than you would expect from simple cardiac congestion.

The renal vessels show extraordinary arterio-sclerosis, amounting to almost complete obstruction, a little beyond their origin from the aorta, and the kidneys show an extreme atrophy of the cortex right round the convexity, which becomes less towards the ends of the organ, and with a good deal of normal-looking tissue in the region between the pyramids. The surface of the organ is not cicatrised, but perfectly smooth, and has the appearance of normal atrophy.

There is a large patch of atheroma at the root of the aorta; there is no cœliac axis artery to be found, but what appears is that the intercostals are hypertrophied. The superior mesenteric artery is completely blocked. The inferior mesenteric has nothing wrong with its orifice, but the trunk of it beyond the orifice is very large and wide, and following this trunk the hypertrophied vessel ran along in the omentum to the transverse colon, along the colon and eventually came down upon the superior mesenteric vessels a little beyond its origin; this inferior mesenteric appears to have conducted the whole circulation of the superior mesenteric and cœliac axis.

The infarction of the spleen was very old, and occupied the centre, while the ends and some of the margins have escaped, and give the impression of being a thrombosis occurring in a very thrombosed splenic artery, with secondary thrombosis of splenic vein and spreading back to the portal system. The patient survived the thrombosis of the vessels, and the vessels became channelled and anastomosis formed. The case would appear to be one aptly described as being "a freak of arterio-sclerosis."

Dr. John Shaw Dunn gave a short account of the

GRAWITZ TUMOUR OF THE KIDNEY,

and showed museum preparations, microscopic specimens, and lantern illustrations of the condition. He stated that renal tumours which are of clinical importance are not of great frequency, and in adult life the most important and most frequent is the Grawitz tumour, which was first described by Grawitz in 1885. These tumours are comparatively rare, and their structure is of considerable interest. The eleven cases under consideration were met with in the Western Infirmary during the past three years, and all, except one, were removed by operation. The symptoms complained of in six cases were swelling, in four it was pain, and there were six cases of hæmaturia. There was no very definite history of injury in any except one case.

It was noticeable that the age at which the tumour grew was rather advanced, the earliest being at 33 years of age, which seemed exceptional, while the youngest of the remainder was 47 and the next 56, and the others between 56-70 belonging to the late period of life.

The gross pathological appearances vary to some extent, the size varying from that of a large plum to a diameter of seven inches, but larger tumours are described. The situation of the tumour also varies to some extent, and of those under review four are in the upper pole of the kidney and two in the lower pole, three practically in the centre, and one case diffuse throughout the kidney and appears to have started in more than one place.

The appearance on section varies in accordance with the amount of hæmorrhage and necrosis which have taken place, and in all cases there is one well marked feature, which is a fairly bright and yellow colour, which is very characteristic and which suggests the character of the tumour when you cut into it. Necrosis may be seen in whitish, greyish or crumbled areas; and rusty brown streaks are generally due to old hæmorrhage or altered blood pigment. In the older and slow-growing parts, bluish white patches of fibrous tissue which is often œdematous and hyaline. In one specimen necrosis had extended to some extent and had been followed by liquefaction, giving rise to a large cyst.

The degree of malignancy by any of them varies considerably. A large tumour may remain in its capsule, but on the other hand a small tumour may spread or give rise to metastases in the kidney. The spread is in the first place into the kidney, and may perforate the capsule, which is not usual, or may spread towards the pelvis of the kidney, which occurs rather frequently; for example, the six cases in which hæmaturia occurred. They may go into the renal vein, as has occurred in four of the specimens, and even spread into the inferior vena cava and give rise to blockage.

Metastases have occurred in only three of these cases, one in the liver and the lungs; and not infrequently the majority of metastases occur in the bones; in one of these cases the first complaint of the patient was swelling of the groin, which gave an impulse on coughing and fluctuation, and after being incised the necrotic tissue removed and examined, it was found to be a metastasis from the region of the pubic bone on the right side; afterwards a tumour was found in the upper pole of left kidney.

The histological characters are very striking in these cases, although the structure varies in different parts; the main feature is that the cells present a very considerable uniformity and peculiar characteristics; they are large cells as rule, with marked cell walls, and the protoplasm appears clear, as if it had been cleared out and replaced by transparent material. In frozen sections fat is found to be present, and often to a very considerable extent. There is also often present a large amount of doubly refractile material, which is probably cholesterin, and glycogen is often found. The arrangements of the cells vary, they differ very markedly from the cells in the kidney; the kidney cells show granular protoplasm, which is dense in appearance and does not show hyaline characters. The peculiar nature of the cells which form the tumour gave rise to the early belief that they did not rise from the kidney and Grawitz thought they arose from aberrant suprarenal tissue, which is found under the capsule of the kidney, and most common towards the upper pole. This view held the field for a number of years, but recently it has been somewhat severely attacked, and Sturrock pointed out that though suprarenal cysts are most common in the upper pole, Grawitz tumour may be found anywhere. If they were suprarenal cysts why did they not occur earlier in life? Sturrock also brought positive evidence that the tumour might grow from renal tissue, and in metaplasia of renal cells in special cases, especially in cysts of granular kidney, in which the characteristics became those, and could not be distinguished from those, of Grawitz tumour cells.

From these and other facts they appear to be renal cancers.

Professor Muir, Dr. Monro Kerr, Dr. Teacher, Dr. A. Young took part in the discussion which followed.

Dr. W. F. Gibb made a further report on the "tumour of the biceps muscle," described at the last meeting, and submitted a note by Dr. Joshua Ferguson on the histological findings, accompanied by microscopical sections from the tumour, and also sections from a tumour of allied character removed recently from the fore-arm.

LIVERPOOL MEDICAL INSTITUTION.

Meeting held Thursday, December 12th, 1912.

Mr. Robert Jones in the Chair.

Pathological Evening.

The following specimens were shown and described :—

Dr. R. G. Wills : Cystic disease of the kidneys (ma).

Mr. K. W. Monsarrat : (1) Volvulus of the intestine associated with Meckel's Diverticulum (ma). (2) Pigmented endothelial malignant growth of the scalp.

Mr. R. W. Murray : Diverticula of the large bowel, with an explanation of the pathology.

Mr. Arthur Evans : (1) Subserous fibroid of cervix uteri; same specimen shows interstitial and submucous fibroid of the body of the uterus (ma) (2) Cystic kidney (ma).

Mr. Thelwall Thomas and Dr. Rees : (1) Carcinoma of the parotid in a woman æt. 34 (mi). (2) Papilloma of large intestine (ma and mi). (3) Spheroidal-celled carcinoma of the breast (mi).

Dr. Nathan Raw : (1) Secondary melanotic sarcoma of the liver. (2) Aneurysm of aorta which ruptured into the trachea.

Mr. Newbolt and Dr. McLellan : (1) Large mass of omentum removed from femoral hernia sac. (2) Fibrosarcoma of breast.

Mr. Douglas-Crawford and Dr. S. W. McLellan : (1) Fibrosarcoma of skin over the breast. (2) Duct carcinoma of breast (mi).

Mr. Armour and Dr. S. W. McLellan : Malignant breast; secondary deposits in glands of the neck (mi).

Dr. Buchanan and Professor Ernest Glynn : Tumour of brain simulating abscess.

Dr. John Hay : Ulcerative colitis.

Mr. Littler Jones and Professor Ernest Glynn : Congenital abscess of the mesentery with fatal volvulus of the small intestine

Mr. Kelly and Professor Ernest Glynn : (1) Fat necrosis in the great omentum in the neighbourhood of a perforated duodenal ulcer. (2) Fracture of the base of the skull causing pneumococcal meningitis.

Professor J. M. Beattie : (1) Endocarditis (4 cases) from rabbits. (2) Knee joint from a rabbit with chronic rheumatic changes—all produced by inoculation of a streptococcus isolated from cases of acute rheumatism.

Professor Beattie, Dr. Stookes, Mr. Murray, Mr. Thelwall Thomas, Dr. Hay, Professor Glynn, and Mr. Evans took part in the discussion of the specimens.

Mr. R. W. Murray read a note on the "Ætiology of Cysts" connected with hernia sacs.

Professor Rushton Parker agreed with Mr. Murray.

Mr. Simpson had met with a case in which there was a double sac.

Mr. Thelwall Thomas thought cysts in association with hernial sacs were due to inflammatory affections.

Mr. Murray replied.

CENTRAL MIDWIVES' BOARD.

Meeting Held Thursday, December 19th, 1912.

Sir Francis Champneys in the Chair.

There were also present Sir George Fordham, Dr. Briggs, Mr. Golding Bird, Dr. Herman, Miss Paget and Mr. Parker Young.

The only matter of particular interest dealt with related to the inquiries made by the Board some little time ago as to whether the

LYING-IN HOSPITALS AND LARGE MIDWIFERY TRAINING-SCHOOLS

in London would admit outside pupils to their lectures. The object was to reduce the number of small training-centres, and secure a high standard of teaching for all midwives. Queen Charlotte's, the City of London, the British Lying-in Hospitals and the Home for Mothers and Babies at Woolwich refused to admit outside pupils; the first two on the ground that while it might raise the standard of teaching for some, the general effect would be a levelling-down, as more candidates would avail themselves of the cheaper method of training—taking their practical work with an approved midwife in the districts only, and getting their lectures at the hospitals. This, of course, would mean a pecuniary loss to them. The British Lying-in Hospital made the excuse that it was shortly moving out of London, and the Home for Mothers and Babies declared it had not room at present for extra students; also, they feared it would be impossible to collect outside pupils who would be willing to undertake the conditions of their training-school—viz., six or twelve months' training. The Clapham Maternity Hospital, the East-End Mothers' Home, the General Lying-in Hospital, Kensington Union Infirmary, and the New Hospital for Women, all agreed to admit outside pupils, many of them having done so already. The Chairman expressed regret that the four first-mentioned hospitals were not sufficiently public-spirited to assist the Board in its efforts to raise the standard of teaching, but, at any rate, they would now have five good centres in various parts of London.

Recognition as teacher was granted to Harold Wacher, M.R.C.S., L.R.C.P., and (*pro hâc vice*) to David Ellis, M.D., B.S.

CORRESPONDENCE.

FROM OUR SPECIAL CORRESPONDENTS ABROAD.

GERMANY.

Berlin, Dec. 21st, 1912.

The Friedmann Treatment of Tuberculosis.

At the close of the meeting of the Medical Society of the 13th, Hr. Friedmann replied to the various speakers who had taken part in the discussion of the subject. He said there had been two classes of speakers—those who knew the results of his treatment and those who did not. With the exception of one case, due to a misunderstanding, all the gentlemen who had known the results of his treatment had confirmed what he had said. His preparation was one of tubercle bacilli that were naturally avirulent. No bacilli, human or bovine, had undergone any weakening process, so that nothing could return to an originally virulent state. He could, therefore, assure Hr. Citron that there was no fear that they could "return" to a virulent state. For the rest, he was of opinion that the principle for the treatment of tuberculosis by living and avirulent bacilli was the correct one, and the one that offered the best prospects. Hr. Klemperer, on the basis of his experiences with Koch's tuberculin, had concluded, both as investigator and physician, that tuberculin had neither curative nor immunising properties. The possibility that a single immunising injection in children might not have a life-long action, but that possibly it might have to be repeated, had been mentioned in his address ; but whether immunity existed only so long as excitors were present in the system none of them knew, for even Hr. Klemperer was not convinced that we all carried the living excitors of small-pox along with us. He had never claimed to cure or to prevent mental diseases with his remedy ; but he had pointed to a possibility that there was some "unexplained connection," and he would there say it again. When Hr. Klemperer said that there was nothing perfectly new in what he had brought forward, it must be placed against that that however interesting his experiments in treating cattle with human tubercle bacilli had been, he had never reported anything about the cure of human tuberculosis by living bacilli. In one great point—namely, that tuberculosis might be cured by suitable living bacilli—Hr. Klemperer agreed with him, and Robert Koch, as Hr. Klemperer had said, admitted the same thing when he said "It is only a question of finding a living bacillus that is avirulent, and that could be injected into the human subject." If Hr. Goldscheider wanted documentary evidence of the cure of tuberculous phthisis, he had to reply that the great amount of material that he had to report, and which grew daily, could neither be introduced within the limits of a short address nor in a newspaper was easy to be understood ; but an accurate account would be given of every case of which a summary account had been given in a monograph that was being prepared. Naturally, in every individual case accurate determination of the clinical, and especially of the physical, conditions would be given (diminution and clearing up of the dulness, gradual disappearance of the râles, etc.) by careful and numerous examinations of the expectoration. An account would be given of the disappearance of the tubercle bacilli. For that the method would be employed that he had described in Exc. Ehrlich's Encyclopædia of microscopical *technique*. In discussing hereditary disposition, also, this would be gone into thoroughly. It was a point that interested him deeply, in view of the former experiments he had made on animals regarding heredity. Hr. Kausch found the answer to his question whether tuberculous patients lost their fevers in his address: "Apart from grave mixed infections, the fever disappears very quickly." Hr. Meyer would not find in his address, as he believed he did, any denial regarding the action of tuberculin, as it was not his way to discredit remedies with which he had had no considerable personal experience. To dispute with Hr. Meyer as to whether a single injection would confer a life-long immunity, or whether the injection would have to be repeated once, was at present too early. Hr. Meyer's objection to immune injection from an ethical ground was, considering the opinions given by all the gentlemen who had a personal knowledge of his method, simply a phrase. If Hr. Wolff-Eisner doubted whether all the cases sent him by the gentlemen named in the address were really cases of active tuberculosis, and with that the diagnostic ability of all those gentlemen, he was spared any word of reply. From Hr. Piorkowski's interesting communication it appeared that his tortoise culture had the same or similar properties as his own weakly virulent tortoise culture (publication 1903). As he had said, that strain was useless for the human subject. When Hr. Bier conceded a curative effect, but said that he had not yet seen any decisive proof, he might be permitted to say that several of the cases shown had been sent him either by Hr. Bier himself or by his assistants. For example, Hr. Bier, in regard to the case of severe tuberculosis of the bones and skin which had not been operated on, had declared, "If this case is cured, it will be decisive proof." It was cured after three injections, without any other treatment. There was a Rontgenograph in the surgical klinik. In another also unoperated case there was a large spina ventosa of the great toe, which healed within six months without curetting. If Hr. Bier now said that he had never seen a closed fungus influenced by his treatment, he must reply that Hr. Bier had never sent him a case of closed fungus disease. The little girl shown, a child of eight, had such a closed fungus. For three months the limb was immovable. Even after a stay in Nordeney she could not walk a step, and had to be carried to Karfunkel's polyklinik. Five days after a simultaneous injection—the rapid effect was due to the intravenous injection—she walked to the polyklinik. The circumference of the knee had permanently diminished, as in another case of grave fungoid disease of the knee joint described to them by Prof. Müller. He would show the patient again later on. If Hr. Bier now said that tuberculous fistulæ occasionally healed of themselves, he might be permitted to reply that the girl of 19 whom they had seen, and who had had a fistula for 18 years, had not been cured in spite of every kind of treatment, but had been some months after the application of his treatment. Further, Hr. Geheimrat Bier had seen the ward sister with the progressive severe tuberculosis of the soft parts of the hand. Hr. Blaschko had sent him the case as an experimentum crucis, and had spoken of it at the previous meeting as "absolutely surprising." The case was not quite healed—the time was too short; it also would be shown later on. Regarding the statements of Hr. Schwenk, he had to say that all the injections in his case were made at a date before that when simultaneous injections were begun, and where inefficient resorption took place in consequence of a secreting weeping infiltration. Hr. Schwenk told him on July 20th, 1911, that certain ulcerations of the bladder had healed. It was plain that they must have reopened in consequence of some abscess formation. The patient was then inaccessible to him for a long time; the injections made the present year were simply for diagnostic purposes and were of tuberculin. The remark of Hr. Schwenk that he (the speaker) had asked for a favourable criticism collapsed completely, for Hr. Schwenk said not only to himself but also to Hr. Karfunkel that he had seen a favourable effect in both of the cases spoken of, but that through "stage fright" he would not say so in public. Hr. Schwenk was wrong also in saying that the case dated from 1911; it was a 1910 case of a period when both *technique* and dosage were imperfect.

Now for a few words in conclusion. He himself, although he had busied himself almost exclusively with tuberculosis for the last 14 years, had doubted and could not believe that the progressive improvements and recoveries related could last. His scepticism also melted away only gradually as in the cases of other gentlemen who had seen the work. They must accustom themselves to the thought and live into the thought of treating tuberculosis by living and uninjured curative material. Naturally they would be convinced of the success as regarded treatment before they did as regarded immunity. In regard to protective injection they would first of all notice how well all these children developed and how they thrived. When through the course of years the efficacy of protective injection had been proved, then immunisation would be proceeded with, but to a much larger extent. The curative effects they would soon confirm for themselves, and then they would be as much surprised and delighted as he was himself.

After the meeting Hr. Friedmann announced that as soon as possible the remedy would be procurable for all and that he would not give any preference to anyone.

AUSTRIA.

Vienna, Dec. 21st, 1912.

Duodenal Ulcers.

At the Gesellschaft für Innere Medizin, Jonas presented a patient, æt. 28, who had complained for a year and a half of great weekly intermitting pain in the left side below the ribs, radiating towards the umbilicus, and sometimes into the right side as a dull cramping pain, particularly three or four hours after food, especially dry food. He never felt hungry, nor was he troubled with vomiting; the stools were slimy, but no blood; tenderness on pressure over the painful parts mentioned above, as well as the ileo-cæcal region, but no pain posteriorly. We have now the differential diagnosis to make of this being an ulcer of the duodenum, a growth between the gall bladder and the stomach or duodenum, appendicitis chronica, or an ulcer in the small curvature of the pylorus, any of which it may be. The Röntgen examination gave a normal condition of the stomach. Rieder's test of six hours' rest gave about one-third of the meal left in the stomach, and the hepatic flexure had a half-moon appearance, with a horizontal or inferior portion of the duodenum filled. There was pain in the stomach when the lower bowel was pressed over the filled portion, but the organ was freely movable. According to Holzknecht, filling of the duodenum is associated with stenosis, and in this case the lower portion of the duodenum would come under that category in a slight form. To decide whether this stenosis is organic or spasmodic—that is, whether it is due to a cicatrix or a tumour, or was simply nervous in character—we must accept Oser's diagnosis for ulceration of the stomach, as pure nervous spasm in the duodenum is unknown. If the pain is removed with milk diet, and the Röntgen rays show a relief of the accumulation in the duodenum and also in the stomach after six hours' rest, it may be accepted as spasmodic, but in this case the duodenum was not altogether clear, and therefore it may be assumed that a spastic and organic condition is existing. In the case of milk diet, the bowel should be clear if not organic or a simple ulcer is present, as the removal of the irritation would at once relieve the spasm, and the distant part in the duodenum by a reflex action would be at once cleared. If there happen to be a combination, however, or organic and spasmodic conditions, the milk diet test and the rest will remove the spasm, but the organic stricture will still remain.

Ortner remarked that these rules for diagnosis were not altogether to be relied upon, but might be accepted as a general guide. He had met with several cases where simple spasm of the bowel would not yield to narcosis.

Benzol Treatment of Leucæmia.

Prof. Schlesinger presented a patient, æt. 53, who had, on entering hospital, 975,000 erythrocytes and 120,000 white blood corpuscles, 95 per cent. of which were mononuclear, the rest, or other 5 per cent., were polymorphic or neutrophile leucocytes. There was no bone marrow element nor nuclear red blood corpuscles. Benzol was given at first, in 30 drop doses, and increased later to ½-gramme doses in capsules, till she was taking 3 grammes of the drug daily. The leucocytes increased at first to 160,000, then gradually fell till they were 11,000 in the tenth week after treatment commenced. The red blood corpuscles at once rose from 975,000 to 3,700,000. The benzol treatment resembles the Röntgen therapy, but the general feeling is more comfortable. The œdema rapidly disappeared and the patient could leave her bed with ease.

Falta said he had the same patient under him some time ago. She had then 1,000,000 red blood corpuscles, with 20 per cent. of hæmoglobin, 250 leucocytes, of which 80 per cent. were small lymphocytes. After six injections of mesothorium the leucocytes fell to 54,000.

Eppinger was in favour of the benzol treatment for myeloid leucæmia. He recorded patients with 200,000 white blood corpuscles and 50 per cent. myelocytes. After four weeks' treatment with benzol the number of white corpuscles fell to 6,000, with 10 per cent. of myelocytes. He preferred prescribing the drug in gelodura capsules.

HUNGARY.

Budapest, Dec. 21st, 1912.

At the recent meeting of the Budapest Royal Medical Society Dr. Vlesinger read a paper on

Angina Pectoris.

He emphasised the importance of rest in bed as the most effective measure in the treatment of angina pectoris. It acts by reducing the arterial tension, while it is a tonic for the heart and reduces its excitability. In order to have the maximum effect, the patient should be kept in bed for from two weeks to two months, the diet being restricted at first to water, and milk, gruels, etc., being gradually allowed. The rest in bed should be supplemented with the usual drugs. Nothing can compare in efficacy, he says, with simple rest in bed; the benefit is most apparent in the elderly and those inclined to corpulence who fall off a little in weight. Patients may be classed as (1), those whose arterial tension during the pain keeps normal or below—repose does not modify it; (2), those in whom the tension is high and is not influenced by repose—this is very rare; (3), those in whom the arterial tension subsides under the influence of the rest in bed—this is the rule in two-thirds of all the cases; (4), those in whom the tension does not subside, but even increases during repose, although the pain does not increase. Among twenty patients from 75 to 73 years old with angina pectoris, he found three with normal or low arterial tension. The tension was unmodified by repose in three other cases, but the pains subsided, showing that the tension was not the cause of the pains during effort. In several other cases the rest in bed reduced the arterial tension at once. One patient was a man of 67 with maximal tension of 28 (Hicks) during an attack. Under bed rest, ice to the heart, restriction of his food to water and milk, and three injections of two milligram morphine, the tension dropped to 19 and the patient felt like a new man. Another patient had long been having attacks of angina pectoris at the slightest effort. A course of rest in bed and restriction to a milk diet with a loss of about 14 pounds in weight restored normal conditions to such an extent that he has been in good health during the eight years since to date, with no recurrence of the angina pectoris. Coronary lesions are not encountered in every case; the aorta or the myocardium may be involved rather than the coronaries. Bed rest is least effectual, Vlesinger added, in case of concomitant aortic insufficiency.

Artificial Reduction of the Circulation as a Therapeutic Measure.

Dr. Hasenfeld applied the shutting off a part of the circulation as a therapeutic measure in a number of cases, on Klapp's and Tornai's suggestion, by applying a constricting band on the limbs for twenty or thirty minutes every morning for a week or so. The effect was striking, he reports, in cases of fatigue and dilatation from stasis of the right heart, the right ventricle being too weak to empty itself completely during the systole. By holding back part of the blood, the right ventricle was able to accomplish its task better, with less expenditure of energy, and was given a chance for rapid recuperation. The most striking benefit was obtained with mitral affections, but benefit was also realised even with degeneration of the myocardium and with beer heart (Bier Herz), the tachycardia, arrhythmia and insufficient systole subsiding. After release from the constriction the pulse becomes slower and more regular. In the severer cases in which heart tonics fail, little can be expected from the constriction method, but he has obtained good results in a few exceptional cases even of this kind. The relief from the measure is so great that often these patients await its application with impatience. Diuresis is generally promoted, and there was profuse sweating in some cases, as the constricting bands were removed; this must be done very slowly and gradually. He uses rubber tubing for the constricting band as for the Homburg technic. He attempted to enhance the action of drugs by this means, finding that a small amount had an immeasurably greater effect when the limbs were excluded from the circulation, but in order to accomplish this the arterial circulation in the limbs had to be arrested likewise, and the constriction kept up for an hour or more; the patients objected to this, so he has abandoned the method.

Chronic Gastritis.

In cases of chronic gastritis Professor Stiller prescribes the following drugs for improving the appetite:

Tinct. chinæ comp.
Tinct. cort. aurantior, aa. 10.0 gm.
Tinct. nucis vomicæ, 1.00.
Tinct. rhei darelli, 4.00.
T.D.S.—Thrice daily, 15-20 drops.
℞ Herbar. galeopsidis grandifol.
Florum verbasci, aa. 20.0 gm.
Marubii albi.
Lichen islandic. aa. 10.0 gm.
N.f. species. Tea.
℞ Extr. fluid condurango, 30.0 gm.
T.D.S.—Thrice daily, 10-15 drops.

LETTERS TO THE EDITOR.

[We do not hold ourselves responsible for the opinions expressed by our Correspondents.]

A NEW CURE FOR TUBERCULOSIS.

To the Editor of The Medical Press and Circular.

Sir,—I have been much interested in reading your article under the above heading in your issue of November 13th, page 508. This new treatment appears to have only the authority of the lay press behind it so far. I wish to draw attention to a method of treatment introduced by an Irish medical man. He introduces a new theory upon "Shut away fluid," which, if he be correct, goes to show that no treatment can possibly cure 100 per cent. of pulmonary cases unless the surgeon and physician join hands in the treatment. The book (*a*) written by Dr. Minchin, of Dublin, contains valuable information which no medical man can afford to be ignorant of. I have adopted his treatment with allyl sulphide inhalations and his special inhaler for some years with gratifying results, and I have found it superior to any other treatment. It was only upon the recent appearance of Dr. Minchin's book that I thought of treating a localised lesion (the class of case in which he claims 100 per cent. of cures). I have only had one case so far, but it is so remarkable a cure that it leads me to support his claims. The case was that of a boy, æt. 18 years, who was delicate and tuberculous, and who had a large cold abscess on his back, which had existed for a considerable time. He was sent by an eminent Belfast physician to Rostrevor in the hope that the change would benefit his general health. This abscess had been treated by repeated aspiration, and his physician wrote asking me to continue this treatment, and certainly not to open it for fear of secondary infection. I aspirated a few times, but it filled up quickly. I asked Dr. Minchin if he thought allyl sulphide would cure it, and he replied, "Certainly; open it freely and apply the allyl sulphide emplastrum, and it will surely be healed in about a month." I was spared the trouble of opening it, as it burst at one of the needle punctures. I tried various antiseptics, syringing, etc., three or more times daily, as the discharge was profuse. It got worse, and I applied the allyl sulphide emplastrum, when the healing which took place was astonishing. There was not a drop of pus exuded, even on pressure, in a fortnight, and it healed perfectly. The boy, I may state, was also placed on the allyl sulphide inhalant, and his condition after six months is so far improved that he has discarded his bath chair, and now walks firmly and well. The lung trouble has for some time remained in abeyance; the cough, which was very troublesome, has ceased; and, indeed, I regard him as a most satisfactory case, and one likely to result in a permanent cure. I now approach any case of tuberculous lesion with confidence and hope.

I am, Sir, yours truly,
John F. Elliott, L.R.C.S.P.Irel.

Rostrevor, December 11th, 1912.

THE NATIONAL HEALTH INSURANCE COMMISSION AND SPECIAL PAYMENTS TO MEDICAL MEN.

The following correspondence has been sent us for publication by the Registrar of the General Medical Council :—

Offices : 299, Oxford Street, W.
December 13th, 1912.

To Sir Robert Morant, K.C.B.,
Chairman of the National Health Insurance Commission (England), Buckingham Gate, S.W.

Dear Sir,—My attention has been called by members of the National Health Insurance Act Committee of the General Medical Council, to an important point arising out of the National Health Insurance (administration of medical benefits) Regulations, 1912; and on behalf of the Committee I desire to submit the point to the Commissioners, in case they should desire to offer any official observation upon it.

Under the alternative forms of agreement, as between a Local Medical Committee and a practitioner on the panel, contained in Part II. of the First Schedule to the Regulations, it is provided in Forms B, C, D, and E that in respect of a given patient the practitioner is entitled to claim special payments for the following services: (a) "Surgical operation requiring local or general anæsthetic," and (b) "Administration of general anæsthetic for the purposes of any operation included under Medical benefit."

These provisions, taken together, are, by some of my colleagues, understood to imply that both the payments in question can be claimed only in cases where the practitioner himself operates, and also administers the general anæsthetic; and that no payment can be claimed under (b) when the operating practitioner obtains the services of a qualified person to administer the anæsthetic to the patient.

On November 27th, 1909, the General Medical Council adopted the following Resolution :—

"That it is expedient in the public interest to provide that the person who administers the anæsthetic for the purpose of inducing unconsciousness during any medical, surgical or dental operation or procedure, should not be the person who performs the said operation or procedure, due provision being made for cases of emergency."

The specific question I desire to put to the Commissioners is this: May an operating practitioner under any of the forms of agreement marked B, C, D, and E, who acts in accordance with the foregoing Resolution of the Council, claim a separate payment in respect of the fee paid by him to another practitioner for administering the general anæsthetic?

I am, yours very faithfully,
(Sd.) Donald MacAlister,
President General Medical Council.

Buckingham Gate,
London, S.W.,
December 16th, 1912.

To The President,
General Council of Medical Education and Registration of the United Kingdom.

Dear Sir,—In reply to your letter of the 13th, I have the honour to say that the answer to the question in its concluding paragraph is in the affirmative: that is to say, under any of the systems B, C, D, or E referred to in your question, the practitioner who performed an operation (itself within the scope of medical benefit) and employed another practitioner to administer an anæsthetic, would be entitled to receive, out of the medical benefit fund, the stated fee for the anæsthetic, subject, of course, to such possible scaling down or up as under systems B, C, or E would apply to all such fees.

Under system A, the provision of the anæsthetist would be one of the services which the practitioner had contracted to render in consideration of the inclusive capitation fee, and he would, in those circumstances, have to pay the anæsthetist himself.

I am, yours truly,
Robert L. Morant.
Chairman National Health Insurance Commission (England).

THE TRIUMPH OF QUACKERY.

To the Editor of The Medical Press and Circular.

Sir,—During a career of more than twenty years as general practitioner and Poor Law Medical Officer, I have come across a great number of cases where valuable time has been lost through patients making use of quack remedies before consulting a medical practitioner, and many cases in which direct harm has been done by the use of these remedies. I can fully confirm Mr. Sewill's statements, but regret that, never thinking they would be needed, I have not kept accurate written records of the cases. The following are some of those I can recall, and of which I can furnish details :—Children and adults suffering from bronchitis, phthisis, and pneumonia, dosed with "lung tonics." Children, while "teething" and really suffering from improper feeding and indigestion, dosed with "soothing syrups." Pregnant women dosing themselves with pills advertised to "relieve irregularities," and causing acute diarrhœa and pain, and, in some cases, miscarriage. Constipation treated by large doses of advertised cathartics instead of regulation of diet and mild laxatives. Hernia treated by quacks, who sell high-priced trusses, which do not fit and which are injurious. Money wasted on the much-advertised sham tonics containing alcohol, instead of being spent on good nourishment. Cases of phthisis treated by "lung

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(*a*) "The Treatment, Prevention and Cure of Tuberculosis and Lupus with Allyl Sulphide." By Wm. C. Minchin, M.D.London: Balliere, Tindall, and Cox. 1911.

tonics" and no proper precautions taken as to isolation and disposal of sputum. Cases of chronic nephritis treated with "kidney pills," and no attempt made to regulate diet, etc. Cases of rheumatoid arthritis treated by "anti-rheumatic rings." Cases of "skin disease," sometimes being syphilis, treated by blood medicines, which have no effect. Cancer cases treated by quack remedies till they were past operation. Wounds treated by quack ointments becoming dangerously septic. Ulcers of the cornea treated by eye ointments until intense inflammation supervened and the sight was threatened.

I offered to give evidence before the Select Committee, and may yet be called.

I am, Sir, yours truly,
POOR LAW OFFICER.

REFLEX STIMULATION OF THE VAGUS CENTRE IN TREATMENT.

To the Editor of THE MEDICAL PRESS AND CIRCULAR.

SIR,—I cannot be the only one of my class—clinical teachers—who will have read with interest the letters on the above subject, contributed to your current issue, respectively, by Dr. Midelton and Dr. Hamilton. I trust they will not consider it in either sense of the word impertinent if I remark that the quality of their writings in itself commands respect. I should be glad to see a more lengthy communication from either or both of them. I shall certainly make trial of the treatment they describe in suitable cases, and shall hope to report the results in due course in your pages. It is a treatment that at least can do no harm. If it is useful the fact ought to be capable of demonstration; the number of cases to which it can be applied is so great. It is, of course, only when a similar reaction takes place in an overwhelming majority of instances that we can begin to put the treatment and the cure in relation as cause and effect. I cannot suggest any rationale of the process. Explanation seems so difficult that scepticism is not only justifiable but even called for. But this does not forbid a trial; it ought only to ensure that the experiments will be carried out with the most rigorous possible scientific exactitude.

I am, Sir, yours truly,
December 20. M.D., F.R.C.P.

OBITUARY.

DR. C. T. WILLIAMS, OF LONDON.

WE deeply regret to record the death of Dr. Charles Theodore Williams, M.V.O., which took place on the 15th inst., at his house in Upper Brook Street, W. The deceased, who was born in 1838, was the son of the late Dr. C. J. B. Williams, F.R.S., Physician Extraordinary to Queen Victoria. He was educated at Harrow, and graduated at Pembroke College, Oxford, with honours in natural science. He continued his professional studies at St. George's Hospital, and also in Paris, becoming M.D. in 1869, and F.R.C.P.Lond. in 1871. From 1866 onwards for some years he held various offices, such as demonstrator of anatomy and physiology at St. George's Hospital, and assistant physician to Brompton Hospital, receiving the appointment of physician at the latter institution in 1871. He was a member of and, in due course, presided over many medical bodies, and was ever ready with advice and, when needful, financial assistance for them. His college at Oxford (where he founded scholarships in human anatomy and physiology and two in pathology, including bacteriology, in relation to medicine elected him an Honorary Fellow in 1907, and he was also hon. treasurer of the Royal Meteorological Society. Dr. Williams belonged to a large number of foreign medical associations. He was physician to the English and Scottish Law Life Assurance Office.

From an early period in his career Dr. Williams gave special attention to the effects of climate, especially at high altitudes, on tubercular complaints. He claimed, in delivering the Harveian Oration at the Royal College of Physicians in 1911, to have personally studied the climates most advantageous for the treatment of consumption all over the world, and to have recorded the effects on over 400 of his private patients. He devoted special care to the investigation of the result of diminished barometric pressure, the diathermic properties of the air, and its freedom from pathogenic germs at high altitudes. He held that professional investigation and popular education were imperatively necessary in the crusade against tuberculosis, and, of course, emphasised the need for early diagnosis and treatment. He took part in many international and other congresses and was a vice-president of the International Anti-Tuberculosis Association. He also acted as physician of the King Edward VII. Sanatorium, and was made a member of the Victorian Order in 1906. His contributions to medical literature included one on "Pulmonary Tuberculosis: Its Arrest, Treatment and Duration," and over 100 papers on his special subjects.

He married, in 1868, Mary, second daughter of the late Mr. J. Gwyn Jeffreys, F.R.S., and was a member of the Athenæum Club.

DR. GEORGE GRIFFITH, J.P.

THE death took place on the 16th inst., at his residence at Milford Haven, of Dr. George Griffith, J.P., ex-chairman of the Pembrokeshire County Council. The deceased, who qualified M.R.C.S.Eng. and L.S.A. Lond. in 1861, was educated at the Normal College, Swansea, and Guy's Hospital. He became M.R.C.P. Edin. in 1874. After qualification, he opened a practice at Haverfordwest, but afterwards removed to Milford Haven, succeeding the late Dr. Field as District Medical Officer for the Haverfordwest Union. This appointment he held until a few years ago, when, on his retirement, his son, Dr. W. S. Griffith, was appointed in his stead.

Dr. Griffith was the first member to represent Milford Haven on the Pembrokeshire County Council, and for three successive years he was chairman. He had also served on the Standing Joint Committee, the Education Committee (being Chairman of the Building Sub-Committee), the now defunct School Board of Milford, of which he was the first and last Chairman, the County Governing Body, the Milford County School Managers, of which he was chairman, and the Haverfordwest Grammar School Governors. He had occupied the position of Chairman of the Pembrokeshire Small Holdings Committee, the County Association (Territorial forces), Pembrokeshire Old-age Pensions Committee, and the Joint Counties' Asylum Committee.

Advancing years brought him additional public work, but amidst it all he found time to take a keen and active interest in politics. He was chairman of the Pembrokeshire Liberal Three Hundred in succession to the late Lord Kensington, as well as Chairman to the Pembroke and Haverfordwest Boroughs Liberal Association. Though he belonged to a family of staunch Nonconformists, he was himself a Churchman, and at one time he held the office of churchwarden at Steynton. Dr. Griffith had the distinction of having saved Mr. Lloyd George's life. Shortly before the death of the Chancellor's brother at Bullford Farm, Steynton, the infant which was destined to rise to such a high position in the councils of the nation had a severe attack of croup, and the life of the child, then only just a year old, was despaired of. In one of his sketches of Mr. Lloyd George's life, Mr. Hugh Edwards, M.P., has the following reference to the matter:—"A messenger was hastily despatched through sleet and snow to the neighbouring town in quest of the doctor. The doctor—a young man fresh from the hospital—hastened back just in time to administer the necessary relief. He devoted himself to the case with a skill and an assiduity that left nothing to chance. He had his reward; there came a turn for the better, and the life of the child was saved."

Medical News in Brief.

The Scottish Medical Colleges and the Insurance Acts

A circular has just been issued to the medical profession of Scotland, signed by the Presidents of the Royal College of Physicians of Edinburgh, the Royal College of Surgeons of Edinburgh, and the Royal Faculty of Physicians and Surgeons of Glasgow. The circular states that the chief aim of the "Seven cardinal principles" was to maintain and extend the freedom of the profession from lay control in the conduct of its professional duties. Neither in the Insurance Act itself, nor in the provisional regulations issued by the Commission, have these demands been fully conceded. If members of the profession in Scotland are satisfied with such minor concessions as have been promised, and if they are prepared to accept service under local Insurance Committees on the terms indicated, the Royal Colleges and the Royal Faculty, while not attempting to dissuade them, cannot be parties to an agreement which is derogatory to the status of the profession in the view of the Colleges and the Faculty. The Act will perpetuate and extend some of the worst features of club practice. The Royal Colleges and the Royal Faculty are assured that many practitioners throughout Scotland believe with them that the Act is still derogatory to the profession, and they wish it to be understood that the profession, in adhering to that view, may count on their sympathy and support.

A New London Cancer Institute.

A new cancer institute has just been established at the Brompton Cancer Hospital, at a cost of some £6,000. The importance of X-rays and other electrical methods in the treatment of malignant disease is now fully recognised, and the Institute has in its possession an excellent equipment for this branch of therapeutics. It is a two-storeyed building furnished with the finest apparatus for X-ray examination, photographs, and treatment that it is possible to obtain, and contains the most powerful X-ray coil in the country. Complete protection has been provided for the doctors, the powerful generators being enclosed in thick lead screens. Only a small window is left through which the rays used for treatment can be passed and focussed, and both the X-ray tube and the patient are shut off in cabinets with lead-glass screens through which the doctor can watch the progress of the treatment.

Surrey Doctors and School Clinics.

At a meeting of the Surrey Education Committee at Kingston last week, it was reported that a meeting of county medical men had been held to consider the proposed establishment of school clinics with whole-time doctors and dentists at a cost of £10,000 a year to the county. A resolution was adopted at the meeting in which it was declared that the treatment of defective school children could be efficiently carried out by the local practitioners, acting as part-time Medical Officers to the proposed clinics of the areas in which they reside, and that the medical practitioners of Surrey were prepared to form a committee to co-operate with the Surrey County Council and discuss a modification of the scheme under consideration. The Education Committee agreed to discuss the matter with the representatives of the doctors.

The Compulsory Notification of Non-Pulmonary Tuberculosis

New Regulations were issued by the Local Government Board last week to the effect that non-pulmonary tuberculosis will be included in the list of compulsorily notifiable diseases from February 1st, 1913.

It is pointed out by the Board that more than half the deaths from that complaint are of children under five years of age, and the hope is expressed that notification may tend to secure an improvement in the conditions under which the children live.

University of London.

The following have passed the M.D. examination for internal and external students—

Medicine.—J. D. Benjafield, B.S., and R. L. Crabb, B.S., Univ. Coll. Hosp.; E. H. A. Pask, B.S., Univ. of Sheffield; R. Phillips, B.S., Middlesex Hosp.; H. F. Renton, B.S., Guy's and Univ. of Leeds; A. L. Robinson, B.S., H. L. Tasker, B.S., and F. M. R. Walshe, B.S., B.Sc., Univ. Coll. Hosp.; T. H. Whittington, King's Coll. Hosp.; T. H. Woodfield, St. Bartholomew's.

Midwifery and Diseases of Women.—G. Dunderdale, B.S., and T. Evans, B.S., Guy's; C. R. Hoskyn, St. Bartholomew's; R. Stout, B.S., Guy's.

Tropical Medicine.—W. Gillitt, Middlesex Hosp. and London Sch. of Trop. Med.

M.S. Examination.—Surgery.—W. Gilliatt, M.D., Middlesex Hosp.; S. L. Graham, Univ. Coll. and London Hosp. and Univ. of Birm.; E. G. Stanley, St. Bartholomew's.

University of Cambridge.

At a Congregation held on December 19th the following degrees were conferred—

M.D.—B. Day and (by proxy) R. A. P. Hill, Caius; F. S. Scales, Jesus.

M.B. and B.C.—T. H. Just, Trinity; H. T. Depree, Clare.

M.B.—J. W. Dew, Clare.

B.C.—G. V. Bakewell, Clare.

Examination for Medical and Surgical Degrees.—The following have now satisfied the examiners in all three sections:—F. S. Adams, Christ's; J. W. Adams and H. C. Attwood, Caius; T. E. Banister, Christ's. H. W. Barnes, Jesus; F. S. Bedale, Clare; E. Calvert, Joh.; W. T. Chaning-Pearce, Emm.; D. G. Cherrington, Trin.; A. C. Clifford, Emm.; H. J. Couchman, Caius; H. G. Earle, Down.; J. V. Fiddian, Emm.; E. C. Hardwick, Corp.; T. L. Hardy, Selwyn; I. W. Joynt, Emm.; W. C. D. Maile, Pemb.; C. G. H. Morse, Emm.; H. J. S. Morton, Trin.; T. H. Oliver, Caius; T. E. Osmond and G. M. Parker, Emm.; S. H. Rouquette, King's; L. T. Rutherford, Clare; A. S. Seabrooke, Christ's; F. B. Smith, King's; G. W. Spencer, Joh.; F. S. Tinker, Pemb.; J. W. Tonks, Caius; C. Warner, Pemb.; A. M. Zamora, Christ's.

University of Edinburgh.

The following degrees were conferred on December 18th:—

M.D.—J. W. H. Babington (Capt. I.M.S.), M.B., Ch.B., G. Bidie (Major, I.M.S.), M.B., C.M., W. L. Burgess, M.B., Ch.B. (with first-class honours), C. C. Iles, New Zealand, M.B., Ch.B., A. J. B. Leckie, M.B., Ch.B., R. V. Morrison (Lieut., I.M.S.), M.B., Ch.B., A. H. Rutherford, Australia, M.B., C.M., Jessie A. Scott, New Zealand, M.B., Ch.B., E. A. Walker, M.B., Ch.B.

Seventy-nine candidates received the M.B., Ch.B., and one the M.B., C.M.

N. H. Bolton, M.B., Ch.B., received the Diploma in Tropical Medicine and Hygiene.

The following candidates have passed in Anatomy of the Second Professional examination:—John S. Armstrong, James G. L. Brown, Alexander F. Campbell, Arthur G. Clark, Andrew Clark, John R. Crolius, David Dunlop, Harry F. Ferguson, George W. M. Findlay, Bhaskar B. Gadgil, Francis M. Halley, Basil Haskins, John A. Henderson, Tanguturi Janakiramiah, Frederick J. C. Johnstone, C. W. S. Davies Jones, Muriel H. Kerr, J. Etienne Larche, Harry Lewis, George A. Macdonald, Alfred L. M'Ilwaine, John Macqueen, John W. Malcolm, Charles E. Meryon, Terence C. St. C. Morton, Ronald N. Phease, Owen D. Price, Norman L. Reis, Charles Resnekov, John W. Riddoch, A. J. Desmond Rowan, Cedric Russell, Joseph H. M. Sandison, George Schussler, Maung Sett, George H. Sinclair, Herbert S. Smith, Robert B. Stewart, Thomas M. J. Stewart, Alexander J. Taylor, Guy M. Torrance, Andre F. de Waal, William Waddell, Chik H. Wan, Lloyd H. Werden, B.A., John D. Whitfield, Maurice E. Willcock, Margaret K. J. Wright.

University of Liverpool.

The following have qualified for the diploma in Tropical Medicine:—Lillie E. Dunn, M.B., B.Ch., C. Hardwicke, M.D., J. R. Jagose, L.M.S., M. N. Mitra, L.M.S., C. D. Myles, M.B., Ch.B., H. Seddon, M.B., Ch.B., J. Smalley, M.B., Ch.B., P. C. H. Strickland, M.R.C.S., L.R.C.P., and W. R. Watson, M.B., B.Ch.

SUMMARY OF RECENT MEDICAL LITERATURE ENGLISH AND FOREIGN.

Specially compiled for THE MEDICAL PRESS AND CIRCULAR.

Ventrofixation and Subsequent Pregnancies.—Fergusson (*Jnl. Obs. and Gyn. Brit. Emp.*, xxii., 3), gives an extensive review of the many operations and modifications for the replacement of retroverted uteri. He considers that the operation is used very often in this country when its use is not absolutely necessary; and even in the most suitable cases for suspension—*i.e.*, pure retroversion—one should be reticent in advising or performing the operation until all other methods have been given a trial. He advises proper reduction under an anæsthetic, and the fitting of as large a Hodge pessary as the vagina will hold comfortably, this to be reduced in size every three months until the uterus retains its normal position without support. When the vaginal outlet is very lax and the pessary tends to come out, it is advisable to repair the perinæum and then begin pessary treatment. The choice of operation lies between Kelly's suspension, Gilliam's operation or one of its modifications, and ventrofixation with sterilisation. This latter should be reserved for women almost at the menopause. Gilliam's operation is more troublesome than Kelly's, and has not been as well tested in its relation to subsequent pregnancies. The reported cases of dystocia after Kelly's suspension are largely discounted, and most of the cases, on being carefully looked into, suggest faulty nomenclature or procedure, or an immediate after history suggestive of septic infection of the wound, possibly very slight. F.

Effects of Ureteral Ligature.—Barney (*Surg., Gyn., and Obs.*, xv., 3) during the past three years has been carrying on experimental work, and has sought to compare his results with those of similar procedures in man. The statements in text-books are conflicting and largely erroneous. He has collected 46 cases of unilateral and 16 of bilateral sudden and complete occlusion of the ureter. The accident produced no immediate symptom whatever except anuria (in the double occlusion cases). In 26 cases, or 41 per cent., of the unilateral cases there was no immediate or remote symptom, but these cases were not followed long enough to give finality, except one who died nine months later of recurrent malignant disease. Anuria only occurred once in the cases of unilateral injury, and this is entirely in accord with the experimental results. In the bilateral cases anuria was the only symptom, and in no case was it allowed to continue for more than 96 hours. In this case, and in one of 48 hours' duration, nephrotomy was performed, and both cases ended fatally. In the others continuity was restored with a mortality of 33 per cent., but the suppression of urine could not be looked upon as alone the cause of death. He concludes that both ureters may be clamped for as long as 72 hours with complete recovery after removal of the obstruction, and one ureter may remain tied for ten days without destroying the integrity of the kidney. Hydronephrosis was observed in 80 per cent. of cases, and was always of moderate size. In the remainder there was said to be no change in the kidney. In unilateral cases the death-rate was 17.8 per cent., but other factors had to be taken into account. Examination by cystoscope might be the only means of diagnosis. F.

Experimental Hydronephrosis.—Scott (*Surg., Gyn., and Obs.*, xv., 3) studied the effects of complete and incomplete ligation of the ureter upon the kidney. It is stated, especially by English and American authorities, that a sudden complete obstruction of the ureter produces atrophy of the kidney, with little or no dilatation of the pelvis, but that an incomplete obstruction produces hydronephrosis of great degree. This statement is wholly controverted by the results of experiments. Complete ligation produced hydronephrosis of degree depending on the duration. The changes in the kidney parenchyma take place in a definite order. Compensatory circulation of the renal vessels probably plays no part in determining atrophy or hydronephrosis. Incomplete obstruction produced hydronephrosis of degree depending upon the amount of force required to overcome the obstruction and the duration. Complete obstruction produced hydronephrosis more rapidly than incomplete, and the microscopic changes are practically the same under both circumstances. Complete obstruction retarded secretion, but did not arrest it. Even in the highest degrees the kidney epithelium is never completely destroyed, but is capable of further secretion. Atrophy did occur in one case of incomplete obstruction, but was not produced by complete permanent obstruction. F.

Two Cases of Peptic Ulcer of the Œsophagus.—Watson (*Brit. Med. Jour.*, November 21st, 1912) reports two cases, both of which occurred in males and both ended fatally. The first patient was admitted to hospital about four hours after the commencement of epigastric pain, with symptoms of acute abdomen. At the laparatomy, half an hour later, no free gas or fluid was found, intestines were red and injected, and there were small omental hæmorrhages. The remaining abdominal organs showed no lesions. The stomach was washed out on the table, but only a small portion of the fluid was returned on siphonage. There was no vomiting. The patient became very restless, respirations increased in rapidity, and the patient died eight hours later. At the autopsy the right pleura was found to contain about a pint of blood-stained fluid, the left about four pints of thick, turbid brown fluid, with the odour of gastric contents, and containing pieces of meat and vegetables. Both lungs were collapsed. In the lower lobe of the left lung, near the middle line, there was a small gangrenous cavity, which communicated by an aperture about ¾in. in diameter with the left pleural cavity, and by a similar-sized orifice with the œsophagus immediately above the cardiac opening of the stomach. The œsophageal rupture showed no chronic ulceration or new growth and the rest of the œsophagus was normal, as was also the stomach. There was no peritonitis. The second patient complained of sickness after food for five months. There was occasionally coffee-ground vomit. Last two months there was constant epigastric pain, and tenderness to the left of ensiform cartilage. As pain and vomiting continued after five weeks' treatment, laparotomy was performed, and nothing abnormal found. Patient died two days later. At the autopsy the stomach was found normal, and there was no peritonitis. There was a chronic punched-out ulcer, the size of half-a-crown, involving the lower end of the œsophagus close up to the cardiac orifice. There was no perforation into the pleural cavity, but the base of the ulcer was extremely thin. The microscope showed chronic inflammation and no evidence of malignant disease. S.

Report on the Treatment of Simple Fractures.—The Report of the Committee of the British Medical Association on the Treatment of Fractures (*Brit. Med. Jour.*, November 30th, 1912) is based on over 2,000 cases examined at general hospitals in England, Ireland, and Scotland, and deals only with simple fractures of the shafts of long bones. The Committee finds that in children under 15 years the results obtained by non-operative treatment are unlikely to be improved upon materially by any other method. Non-operative cases (1,017) 90.5 per cent. good functional results; operative cases (64) 93.6 per cent.

good functional results. In non-operative cases of fracture of both bones of the forearm the results are not good. In comparison with the non-operative results in children the result of this treatment in those past childhood is not satisfactory, and the older the patient the worse the result. In cases treated by immediate operation, the deleterious influence of age on the functional result is less marked. In nearly all age groups, operative cases show a higher percentage of good results than non-operative cases. Although the functional result may be good with an indifferent anatomical result, the most certain way to obtain a good functional result is to secure a good anatomical result. No method which does not promise a good anatomical result should be accepted as a method of choice. For this reason mobilisation and massage by themselves have not been found to secure a high percentage of good results, though they are valuable supplementary methods of treatment. Of operative measures, those which secure reposition and absolute fixation of the fragments yield better results than methods which fall short of this. Imperfect fixation by wires and sutures is unsatisfactory except in the case of the olecranon process of the ulna. In order to secure the most satisfactory results from operative treatment, it should be resorted to as soon after the accident as possible. When employed in consequence of failure of non-operative measures, the results compare very unfavourably with those of immediate operation. Skill, experience and strict asepsis are absolutely essential for good results in operative treatment; most failures are due to infection of the wound. The mortality directly due to the operative treatment of simple fractures of the long bones has been found to be so small that it cannot be urged as a sufficient reason against operative treatment. In general practice the non-operative proceedures are likely to remain for some time yet the more safe and serviceable.

S.

Excretion of Formaldehyde by Patients taking Urotropin.—L'Espérance (*Boston Med. and Surg. Journ.*, October 24th, 1912) relates the results of a study he has made on this subject, using Burnam's test. This test is performed as follows:—"To about 10 c.c. of suspected urine in a test-tube at body temperature is added (1) of solution phenylhydrazine HCl 0.5 per cent. gtts. iii; (2) solution sodium nitroprusside 5 per cent. gtts. iii; (3) of saturated solution sodium hydrate a few drops poured along the side of the test-tube. As this latter solution diffuses throughout the urine in the tube, if formaldehyde is present a deep purplish-black colour is seen, quickly changing to dark green, gradually getting of a lighter shade of the same colour, to, finally, pale yellow." In the absence of formaldehyde, on the addition of the sodium hydrate solution the urine turns to a reddish colour and then to a light yellow. This test the author has found to be trustworthy, and is quickly and easily performed. Investigation has shown that formaldehyde, to be of any use as a urinary antiseptic, must be present in the urine in a strength of at least one part in six thousand. Burnam's test applied to the urine of 250 patients taking urotropin showed the presence of formaldehyde in 130 cases, or 52 per cent. In the case of the other 120, or 48 per cent., no reaction for formaldehyde was obtained. As a result of this work L'Espérance comes to the following conclusions: "(1) Formaldehyde appears in the urine in only 52 per cent. of patients taking urotropin; (2) the reaction of the urine is of no importance; (3) alkalies taken with, or in combination with, urotropin have no effect on excretion; (4) duration of excretion of formaldehyde is about four to six hours; (5) increase of dosage does not affect excretion in negative urines; (6) urotropin is practically symptomless in an average dose; (7) the urine of all patients taking urotropin should be tested for formaldehyde; (8) patients not excreting formaldehyde are symptomless regardless of the amount of urotropin taken." To this inability of the kidneys of some patients to decompose the drug is attributed the varying results obtained from its use as a therapeutic agent.

K.

Salvarsan in Leprosy.—Wellman (*New York Med. Journ.*, November 16th, 1912) records the result of his treatment by salvarsan of five patients suffering from leprosy. He found that clinical improvement resulted in four out of the five patients treated, while the other case ended fatally from the result of accidental burns before the observations were completed. The two patients in whom the disease was the least advanced showed the best results. Two other patients treated with injections of normal saline were used as controls; one of these remained unchanged in condition and the other grew steadily worse and finally died. Wellman concludes that where the patient is not too weakened from the disease salvarsan may be administered without harm. Some improvement, especially in early cases, may be expected, but there is no evidence that such effect of the drug is in any way specific or permanent. Arsenic has long been employed in leprosy, "and we have no evidence that salvarsan is superior in its action to the other forms of arsenic which have been used by previous observers."

K.

Typhoid Pleurisy.—Finley (*Canadian Med. Assoc. Journ.*, September, 1912) records the results of his investigations of pleurisy occurring in the course of typhoid fever. He finds that nineteen cases occurred at the Montreal General Hospital among twenty-one hundred cases of typhoid fever treated there from 1897 to June 1912. The incidence of pleurisy varies considerably in different epidemics of typhoid and in different localities. The pleurisy usually develops towards the middle or latter part of the fever, but it is sometimes found at the onset or after defervescence. In the cases examined the average period of onset was the 25th day, the two earliest cases beginning on the first and fourth days, and the two latest on the 39th and 96th days. In only nine of the cases was the quantity of fluid sufficient to warrant its removal, and of these in five the fluid was found to be sero-fibrinous, in two hæmorrhagic, and in two purulent. The typhoid bacilli occur in all types of effusion, and even in purulent cases may occur in pure culture. The course of typhoid pleurisy is almost invariably benign; the fluid usually remains small in amount, and is absorbed in a period of from two days to several weeks, leaving but little trace of pleural thickening and adhesions. Only one fatal case was recorded in the series.

K.

Transverse Episiotomy.—Waldstein (*Samml. Klin. Vortr.*), after discussing the methods of lateral and median episiotomy, describes his method, which is said to combine the advantages of the others. If perineal rupture is imminent, or has already taken place, he makes an incision in perpendicular direction towards the raphe, passing through the skin, the subcutaneous tissue, to the perineal fascia; length and distance from the anus and vulva are varying, according to the increase required. The incision ought not to be shorter than 2 c.m., and should involve the tendinous perineal centre, where there is commonly a shallow groove. If there is no risk of perineal rupture, no further incision should be made. In the case of perineal rupture, it extends only to the transverse incision, and the condition resembles that produced by the incision. Where the perineal rupture cannot be prevented, a median incision should be made on the transverse, passing with its posterior angle through the sphincter ani, whilst—as the author suggests—the posterior surface of the wound, laid across and before the sphincter, is rather a protection to it. Waldstein has applied his method in 40 cases, out of which there were 36 primiparæ (the children showed a weight of of from 3,500 to 7,000 gr.); nine cases were delivered by means of forceps. There has been but one case of perineal rupture. After delivery the wound extends but a short distance towards the vagina; its perineal portion shows a symmetrical shape and but little gaping. Transverse episiotomy combines, thus, the advantages of the other methods. The protection of the sphincter is a perfect one. It may be performed for preventive purposes without provoking permanent injury and gives the largest increase of space.

N.

NOTICES TO CORRESPONDENTS, &c.

☛ Correspondents requiring a reply in this column are particularly requested to make use of a *Distinctive Signature or Initial*, and to avoid the practice of signing themselves "Reader," "Subscriber," "Old Subscriber," etc. Much confusion will be spared by attention to this rule.

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THE WELFARE OF INFANCY:—GREAT NATIONAL MOVEMENT.

Their Majesties the King and Queen have graciously lent their patronage to the National Association for the Prevention of Infant Mortality and for the Welfare of Infancy. The foundation of this Society is the outcome of a public meeting held last July at the Caxton Hall under the presidency of Mr. John Burns. It represents a Triple Alliance between the National Conferences on Infant Mortality, the National League for Physical Education and Improvement and its department, the Association of Infant Consultations and Schools for Mothers, and the Women's National Health Association of Ireland.

As an earnest of the important work the newly constituted society proposes to carry on, it has already arranged to hold in London a post-graduate course on the feeding and care of infants. This course will be held in London from January 6th to 16th next.

The Executive Committee is now actively engaged in organising an English-speaking Conference on Infant Mortality, which is to be held in London on August 4th and 5th next, a date which immediately precedes the International Medical Congress.

Further particulars with respect to the Association, membership in which is open to all who sympathise, or of the post-graduate course and the conference, may be obtained from Miss Halford, Secretary to the Association, 4 Tavistock Square, London, W.C.

Puzzled (Liverpool).—An effectual remedy, if our correspondent has not tried it, is rubbing an unbroken chilblain with Ol. Terebenthinæ.

Dr. S.—In our opinion the matter does not call for further notice at present.

PATENT MEDICINE FINES.

Fines and costs amounting to £35 16s. were imposed at the Mansion House Court last week, on the London agent for some American vendors of patent medicines, for selling the said preparations without a licence, and without having paid the Government Stamp duty.

Q. B. (Worthington).—We will make inquiries, but our impression is that the work has been out of print for some years.

Ex Æquali.—The bond, though exacting, does not appear to us to be unreasonable, having regard to the circumstances.

THE MILK BILL.

The following is the memorandum of the Milk and Dairies Bill which Mr. Burns, with Mr. Herbert Lewis, has introduced:—

The main objects of this Bill are to provide for—

(1) The more effective registration of dairies and dairymen;

(2) The inspection of dairies and the examination of cows therein;

(3) The prohibition of the supply of milk from a dairy where such a supply has caused or would be likely to cause infectious diseases, including tuberculosis;

(4) The prevention of the sale of tuberculous milk;

(5) The regulation of the importation of milk so as to prevent danger to public health arising therefrom;

(6) The issue of regulations for securing the supply of pure and wholesome milk;

(7) The establishment by local authorities in populous places of milk depots for the sale of milk specially prepared for infants.

The provisions as to registration supersede the provisions as to the registration of dairies contained in the Contagious Diseases (Animals) Acts and the orders made thereunder.

The provisions as to the inspection of dairies and the prohibition of the supply of milk are based on the provisions of the Public Health (Scotland) Act, 1897.

The clause as to the prohibition of the sale of tuberculous milk is taken from the model milk clauses, which have been incorporated in many local Acts, but the scope of the enactment is somewhat extended.

The Board of Agriculture and Fisheries propose to issue an order under the Diseases of Animals Act, 1894, dealing with tuberculous cows, and providing for the payment of compensation in cases of slaughter by the local authority. The Treasury are prepared, subject to the assent of Parliament, to sanction the payment from the Exchequer of one-half of the net amount paid by way of compensations for a period of five years.

Dr. S. A. (Herts).—Why not give a test meal in the case of suspected gastric cancer? It can, at any rate, do no harm. Considerable diminution of free hydrochloric acid is generally regarded as a point in favour of carcinoma.

M.D., L.R.C.P. (Exeter).—Carbon dioxide snow has been found very useful in the treatment of rodent ulcers of the face.

Appointments.

Ball, W. Girling, F.R.C.S.Eng., Surgeon to the City of London Truss Society for the Treatment of Hernia.

Bentham, Miss, Clinical Assistant to the Throat, Nose, and Ear Department at the Royal Free Hospital.

Clegg, Sydney James, M.B., Ch.B., D.P.H.Manch., Assistant Medical Officer of Health to the City and County of Newcastle-upon-Tyne.

Cunningham, J. F., F.R.C.S.Eng., Consulting Ophthalmologist to the Royal Bethlem Hospital.

Davies-Colley, Miss Eleanor, F.R.C.S.Eng., Surgical Registrar to the Royal Free Hospital.

Evans, A. H., M.D., M.S.Lond., F.R.C.S.Eng., Consulting Surgeon to the Royal Bethlem Hospital.

Fraser, Miss, M.D., Medical Registrar to the Royal Free Hospital.

Howarth, William James, M.D., Ch.B., D.P.H.Vict., Medical Officer of Health of the City of London.

Lewis, T., M.D., B.S.Lond., Assistant Physician to University College Hospital.

Mollinson, W. M., M.C.Cantab., F.R.C.S.Eng., Consulting Aurist and Laryngologist to the Royal Bethlem Hospital.

Morris, C. W., Registrar of Anæsthetics at University College Hospital.

O'Flynn, Miss Sara, M.B., Ch.B.Edin., Clinical Assistant and Second Clinical Assistant to the Gynæcological Department at the Royal Free Hospital.

Purvis, George Carrington, M.D., B.Sc.Edin., Medical Officer of Health of Grahamstown, Cape Colony.

Stevens, T. G., M.D.Lond., M.R.C.P.Lond., F.R.C.S., Consulting Gynæcologist to the Royal Bethlem Hospital.

Turner, Miss, M.B., B.S., Clinical Assistant at the Royal Free Hospital.

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Births.

Burton Marshall.—On Dec. 18th, at Manley House, Eaton, Norwich, the wife of William Burton Marshall, M.B., M.R.C.S. (*née* Kathleen Boraston), of a daughter.

Milsom.—On Dec. 15th, at 399 London Road, Thornton Heath, the wife of E. G. D. Milsom, M.R.C.S., of a daughter.

Pereira.—On Dec. 19th, at 9 Duke's Avenue, Muswell Hill, the wife of Dr. Pereira, of a daughter.

Reynolds.—On Dec. 16th, at Rossendale Lodge, 17 Streatham Hill, S.W., the wife of Russell J. Reynolds, M.B., B.S.Lond., L.R.C.P., M.R.C.S., of a son.

Marriages.

Carson—Willis.—On Dec. 19th, at All Saints, Harston, Cambridgeshire, Herbert William Carson, F.R.C.S., of 111 Harley Street, son of James Hamilton Carson, Esq., to Mary, daughter of Ducan Willis, Esq., of Wallasey, Cheshire.

Deaths.

Tremearne.—On Nov. 14th. at Toorak, Melbourne, Australia, from heart failure, John Tremearne, M.R.C.S., J.P., only son of the late J. N. Tremearne, of St. Ives, Cornwall.

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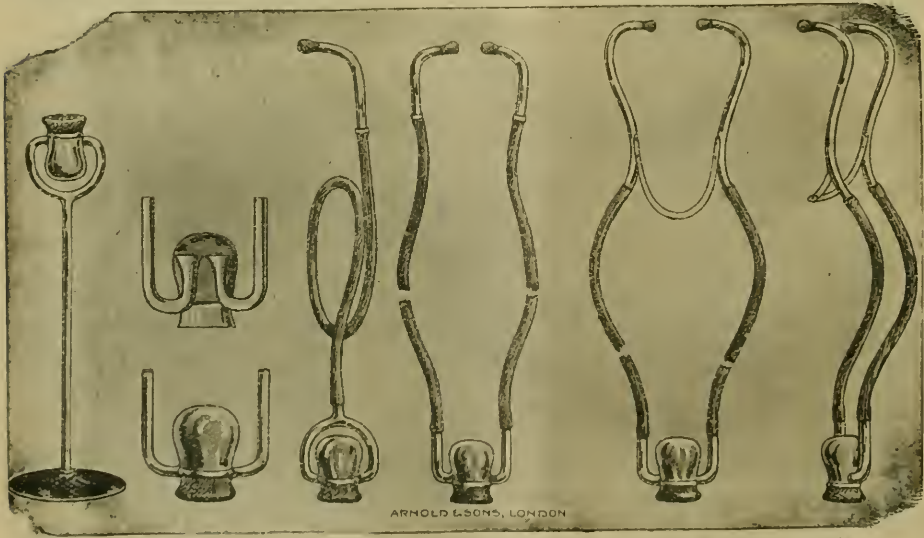

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25th June, 1912. STEWART JOHNSON, Secretary.

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